FLORIDA BUILDING COMMISSION

TAC CHAIR'S MEETING

AUGUST 15, 2016 MEETING SUMMARY REPORT

MONDAY, AUGUST 15, 2016

MEETING SUMMARY AND OVERVIEW

At the Monday, August 15, 2016 meeting the TAC 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 2017 FBC and/or legislative directive, 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 to recommended by the Commission approve funding the research projects for fiscal year 2016 - 2017 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 (\$248,207 total), and staff administering and overseeing the research, and negotiating scoping and 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 August 15, 2016 TAC Chairs meeting is as follows:

http://www.floridabuilding.org/fbc/commission/FBC_0816/TAC_Chair/TAC_Chairs_Agenda_8 016.html

AGENDA ITEM OUTCOMES

OPENING AND MEETING ATTENDANCE

The meeting was opened at 10:00 AM once a quorum was established, and the following TAC chairs participated:

Dick Browdy (FBC Chair), Steve Bassett (Mechanical), Jim Batts (Swimming Pool), Jay Carlson (Code Administration), Kevin Flanagan (Electrical), Jeff Gross (Accessibility), Darrell Phillips (Special Occupancy), Fred Schilling (Plumbing), Jim Schock (Structural), Drew Smith (Energy), Brian Swope (Roofing).

Chairs Not In Attendance: Hamid Bahadori (Fire).

Other Commissioners In Attendance: Bob Boyer.

DBPR STAFF PRESENT

Norman Bellamy, Jim Hammers, April Hammonds, Mo Madani, Marlita Peters, 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: http://consensus.fsu.edu/



AGENDA REVIEW

The TAC chairs voted unanimously, 11 - 0 in favor, to approve the agenda for the August 15, 2016 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 AUGUST 17, 2015 MINUTES

The TAC chairs voted unanimously, 11 - 0 in favor, to approve the minutes for the August 17, 2015 meeting as posted/presented.

DEFINITIONS OF RESEARCH AND TECHNICAL ENRICHMENT

At the August 2013 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:

Research: 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.

AVAILABLE FUNDING SOURCES

Mo Madani reported that the Commission has approximately \$250,000 available for funding research projects for fiscal year 2016 - 2017.

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 needed for the 2017 FBC, and/or legislative directive; and, 3.) funding available (full or partial). The TAC chairs voted that the following 7 of 16 projects met the criteria and should be evaluated for funding (7):

- Continuation of corrosion of roofing fasteners. {Roofing TAC P2}(UF) [\$39,086]
- Document field cases of attics sealed with spray foam insulation. {Roofing TAC P1}(UF) [\$155,431]
- Evaluation of the Cost Impact of Florida's specific changes to 2015 I-Codes "Prescriptive Code Changes". {Fire TAC, Plumbing TAC and Electrical TAC}(UF) [\$38,990]
- Improved Hot Water Code Calculation. {Energy TAC P1} (FSEC) [\$22,000]
- Developing VRF System Credits for the Florida Energy Code. {Energy TAC P2} (FSEC) [\$24,000]
- Residential Performance Code Methodology for Crediting Dehumidification and Smart Vent Applications. {Energy TAC P5} (FSEC) [\$20,000]
- Supplemental Field Study of Sealed Attics. {Roofing TAC P3}(FSEC) [\$64,000]

Projects that were determined not to meet the criteria (9):

- Measured Impacts Whole-house Mechanical Ventilation on Comfort, Energy Use and Pollutants. {Energy TAC P3 and Mechanical TAC P1} (FSEC) [\$81,000]
- Simulating the Effects of Temperature Based Smart Ventilation Control on Comfort, Energy Use and Air Exchange. {Energy TAC P4 and Mechanical TAC P2}(FSEC) [\$30,000]
- Investigation of Potential Daylight Energy Savings Attributed to the Use of Skylights in Florida Residential Buildings. {Energy TAC P6} (FSEC) [\$26,000]
- Code Compliance for High-Efficiency Lighting in Florid Homes. {Energy TAC P7} (FSEC) [\$30,000]
- Thermal Analyzer for Concrete Blocks. {Energy TAC P8} (FSEC) [\$20,000]
- Study for roof drains with large size pipe larger than 4 inch through the American Society of Plumbing Engineers Research Foundation. {Plumbing TAC P1}(Gary Duren) [\$100,000]
- Expand on code changes for the first report on the zero lot line residential expanding and focus on one hour soffit and true zero lot line layouts. {Fire TAC P1}(Brad Schiffer) [\$TBD]
- Create an Electronic Storage Protocol for Building Permits. {Code Administration TAC P1}(FSEC) [\$45,000]
- Workshop on Evaluation of the Cost Impact of 2015 ICC Prescriptive Code Changes. {Fire TAC, Plumbing TAC and Electrical TAC}(UF) [\$39,500]

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 TAC chairs were informed that the 7 projects meeting the criteria for funding required \$363,507 to fully fund them, and there is \$250,000 available for funding, leaving a funding deficit of \$113,507 for the full funding of the 16 projects.

Following presentations and public comments the TAC chairs ranked each of the 7 projects on a 10-point 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 Continuation of corrosion of roofing fasteners. {Roofing TAC P2}(UF) [\$39,086] This project was recommended to be fully funded at \$39,086

#2 Document field cases of attics sealed with spray foam insulation. {Roofing TAC P1}(UF/ONL) [\$155,431]

This project was recommended to be partially funded at \$128,221 (the two house option).

#3: Supplemental Field Study of Sealed Attics. {Roofing TAC P3}(FSEC) [\$64,000] This project was not recommended for funding.

#4: Improved Hot Water Code Calculation. {Energy TAC P1} (FSEC) [\$22,000] This project was recommended to be fully funded at \$22,000.

#5: Evaluation of the Cost Impact of Florida's specific changes to 2015 I-Codes "Prescriptive Code Changes". {Fire TAC, Plumbing TAC and Electrical TAC} (UF) [\$38,990] This project was recommended to be fully funded at \$38,990.

#6: Residential Performance Code Methodology for Crediting Dehumidification and Smart Vent Applications. {Energy TAC P5} (FSEC) [\$20,000] This project was recommended to be fully funded at \$20,000.

#7: Developing VRF System Credits for the Florida Energy Code. {Energy TAC P2} (FSEC) [\$24,000]

This project was not recommended for funding.

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

TAC Actions:

MOTION—The TAC chairs' voted, 9-2* in favor, to recommend the Commission approve funding the research projects for fiscal year 2016 - 2017 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 2017 FBC and/or legislative directive, and 3.) funding available (full or partial), and should be approved for funding based on the funding levels recommended by the TAC chairs (\$248,207 total), and staff administering and overseeing the research, and negotiating contracting and scoping as appropriate.

^{*} Commissioner Bassett and Smith voted against the motion.

COMMITTEE OF TAC CHAIRS RECOMMENDATIONS FOR COMMISSION ACTION

MOTION—The TAC chairs' voted, 9 - 2 in favor, to recommend the Commission approve funding the research projects for fiscal year 2016 - 2017 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 2017 FBC and/or legislative directive, and 3.) funding available (full or partial), and should be approved for funding based on the funding levels recommended by the TAC chairs (\$248,207 total), and staff administering and overseeing the research, and negotiating contracting and scoping as appropriate.

ADJOURN

Commissioner Browdy, Commission Chair, thanked TAC chairs and the public for their attendance and participation, and adjourned the meeting at 3:00 PM on Monday, August 15, 2016.

ATTACHMENT 1 AUGUST 15, 2015 MEETING AGENDA

Agenda
Technical Advisory Chairpersons (TAC)
10:00 A.M. August 15, 2016
Embassy Suites Fort Lauderdale
1100 SE 17th Street Causeway
Fort Lauderdale, Florida

1. Welcome and Opening Roll Call

Chairman

Review and Approval of Agenda and August 17, 2015 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	Frederick Schilling
Roofing	Brian Swope
Special Occupancy	Darrell Phillips
Swimming Pools	James Batts

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

Mo Madani

3. Review research Workplan/Timeline

Mo Madani

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

Presentations of proposed research projects by proponents

Energy Technical Advisory Committee

Priority 1:	Improved Hot Water Code Calculation (FSEC/\$22,000)
Priority 2:	Developing VRF System Credits for the Florida Energy Code
	(FSEC/\$24,000)
Priority 3:	Measured Impacts Whole-House Mechanical Ventilation on Comfort,
	Energy Use and Pollutants (FSEC/\$81,000)
Priority 4:	Simulating the Effects of Temperature Based Smart Ventilation Control on
	Comfort, Energy Use and Air Exchange (FSEC/\$30,000)
Priority 5:	Residential Performance Code Methodology for Crediting Dehumidification
	and Smart Vent Applications (FSEC/\$20,000)
Priority 6:	Investigation of Potential Daylight Energy Savings Attributed to the Use of
	Skylights in Florida Residential Buildings (\$26,000)
Priority 7:	Code Compliance for High-Efficacy Lighting in Florida Homes
-	(FSEC/\$30,000)
Priority 8:	Thermal Analyzer for Concrete Blocks (FSEC/\$20,000)

Mechanical Technical Advisory Committee

Priority 1:	Measured Impacts Whole-House Mechanical Ventilation on Comfort,
	Energy Use and Pollutants (FSEC/\$81,000)
Priority 2:	Simulating the Effects of Temperature Based Smart Ventilation Control on
·	Comfort, Energy Use and Air Exchange (FSEC/\$30,000)
Priority 3:	Residential Performance Code Methodology for Crediting Dehumidification
•	and Smart Vent Applications (FSEC/\$20,000)

Roofing Technical Advisory Committee (TBD)

Priority 1:	Document field cases of attics sealed with spray foam insulation
	(UF/\$155,431)
Priority 2:	Continuation of corrosion of roofing fasteners (UF/\$39,086)
Priority 3:	Supplemental Field Study of Sealed Attics (FSEC/\$64,000)

Plumbing Technical Advisory Committee

Study for roof drains with large size pipe larger than 4 inch through the American Society of Plumbing Engineers Research Foundation (Gary Duren/\$100,000)

Fire Technical Advisory Committee

Expand on code changes for the first report on the zero lot line residential expanding and focus on one hour soffit and true zero lot line layouts (Brad Schiffer/\$TBD)

Code Admin Technical Advisory Committee

Create an Electronic Storage Protocol for Building Permits (FSEC/\$45,000)

Fire TAC/Plumbing TAC/Electrical TAC

Workshop on Evaluation of the Cost Impact of 2015 ICC Prescriptive Code Changes (UF/\$39,950)

Evaluation of the Cost Impact of Florida's specific changes to 2015 I-Codes "Prescriptive Code Changes" (UF/\$38,990)

5. Adjournment

Chairman

ATTACHMENT 2 RESEARCH WORKPLAN AND TIMELINE

RESEARCH WORKPLAN	
TIMELINE	MILESTONE
June 3 - June 24, 2016	Convene TACs to solicit research topics
August 3, 2016	Compile outcomes of TACs meetings/various research topics by TAC.
August 3, 2016	Make available list of research topics/Scope of Work for review at the Chairs meeting.
August 15, 2016	Chair meeting to consider and recommend list of research topics for consideration by the Commission.
August 16-17, 2016	Commission decisions regarding funding research projects
August/Sept. 2016	Solicit qualified entity to do the research.
October 2016	Draft contract for research and implementation.
November 2016	Start contract (contract time frame 1- year).
	Funding is contingent upon budget appropriation and must be spent within the Fiscal Year.
June 15, 2017	Complete research or partial research.

ATTACHMENT 3 RESEARCH PROPOSAL COSTS

Energy Technical Advisory Committee

Daionier 1.	Improved Het Weter Code Colonistics (Energy TAC D1) (ECEC) [\$22,000]
Priority 1:	Improved Hot Water Code Calculation. {Energy TAC P1} (FSEC) [\$22,000]
Priority 2:	Developing VRF System Credits for the Florida Energy Code.
	{Energy TAC P2} (FSEC) [\$24,000]
Priority 3:	Measured Impacts Whole-house Mechanical Ventilation on Comfort, Energy Use
•	and Pollutants. {Energy TAC P3 and Mechanical TAC P1} (FSEC) [\$81,000]
Priority 4:	Simulating the Effects of Temperature Based Smart Ventilation Control on Comfort,
	Energy Use and Air Exchange. {Energy TAC P4 and Mechanical TAC P2} (FSEC)
	[\$30,000]
Priority 5:	Residential Performance Code Methodology for Crediting Dehumidification and
	Smart Vent Applications. {Energy TAC P5} (FSEC) [\$20,000]
Priority 6:	Investigation of Potential Daylight Energy Savings Attributed to the Use of Skylights
•	in Florida Residential Buildings. {Energy TAC P6} (FSEC) [\$26,000]
Priority 7:	Code Compliance for High-Efficiency Lighting in Florid Homes. {Energy TAC P7}
·	(FSEC) [\$30,000]
Priority 8:	Thermal Analyzer for Concrete Blocks. {Energy TAC P8} (FSEC) [\$20,000]

Mechanical Technical Advisory Committee

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Energy Use and Air Exchange. {Mechanical TAC P2 and Energy TAC P4}(FSEC)
[\$30,000]
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Roofing Technical Advisory Committee

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Fire TAC

Expand on code changes for the first report on the zero lot line residential expanding and focus on one hour soffit and true zero lot line layouts. {Fire TAC P1}(Brad Schiffer) [\$TBD]

Code Administration TAC

Create an Electronic Storage Protocol for Building Permits. {Code Administration TAC P1}(FSEC) [\$45,000]

Fire, Pluming, and Electrical Technical Advisory Committees

Workshop on Evaluation of the Cost Impact of 2015 ICC Prescriptive Code Changes. {Fire TAC, Plumbing TAC and Electrical TAC}(UF) [\$39,500]

Evaluation of the Cost Impact of Florida's specific changes to 2015 I-Codes "Prescriptive Code Changes". {Fire TAC, Plumbing TAC and Electrical TAC}(UF) [\$38,990]