

FLORIDA BUILDING COMMISSION
TAC CHAIRPERSONS MEETING
AUGUST 17, 2015 MEETING SUMMARY REPORT

MONDAY, AUGUST 17, 2015

MEETING SUMMARY AND OVERVIEW

At the Monday, August 17, 2015 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 unanimously to recommend the Commission approve funding the research projects for fiscal year 2015-2016 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 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 17, 2015 TAC Chairs meeting is as follows:

http://www.floridabuilding.org/fbc/commission/FBC_0815/TAC_Chair/TAC_Chairs_Agenda.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), Hamid Bahadori (Fire), Steve Bassett (Mechanical), Bo Boyer (Plumbing), Jay Carlson (Code Administration), Kevin Flanagan (Electrical), Jeff Gross (Accessibility), Darrell Phillips (Special Occupancy), Jim Schock (Structural), Brian Swope (Roofing).

Other Commissioners In Attendance: Fred Schilling, and Jeff Stone.

DBPR STAFF PRESENT

Robert Benbow, Barbara Bryant, Chris Burgwald, Jim Hammers, April Hammonds, and Mo Madani.

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/>



CONSENSUS CENTER

AGENDA REVIEW

The TAC chairs voted unanimously, 8 - 0 in favor, to approve the agenda for the August 17, 2015 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 21, 2014 MINUTES

The TAC chairs voted unanimously, 8 - 0 in favor, to approve the minutes for the August 21, 2014 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.

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.

AVAILABLE FUNDING SOURCES

Mo Madani reported that the Commission has approximately \$400,000 available for funding research projects for fiscal year 2015-2016.

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 8 of 16 projects met the criteria and should be evaluated for funding:

- Project #1: Measure temperature, humidity and CO2 levels in new homes.
- Project #2: Residential hot water distribution.
- Project #4: Continuation of corrosion of roofing fasteners.
- Project #5: Document field cases of attics sealed with spray foam insulation.
- Project #12: Evaluate an approve method for achieving 1 hr. fire resistance rating under side of projections – focus on zero lot line – come up with details that is tested and evaluated. Evaluate an alternative to the zero lot line provisions.
- Project #13: Evaluate the economic impact of the delayed code provisions.
(Project #14 was not evaluated since it is included as part of Project #13: Blower door testing cost research).
- Project #15: Estimate the cost impact of the 2015 International Building Codes changes.
- Project #16: Electrocution Prevention Study: Study on how many public and private pools have high voltage lighting? What is the cost to change to low voltage and the time frame to change in the next 5 or 10 years?

Projects that were determined not to meet the criteria:

- Project #3: Residential kitchen exhaust ventilation.
- Project #6: Cost difference study between the different types of shutter systems vs. an impact resistant system to understand the advantages and disadvantages of these systems.
- Project #7: Study of corrosion, load and deterioration issues on different types of balconies.
- Project #8: Research acceptable methods for remediation of aluminum wire connections in existing/older homes in a remodeling.
- Project #9: Study pipe sizing with roof drains and the problems with roofs collapsing due to pipe failure.
- Project #10: Consider the potential of a workshop to give guidance to help explain to the general public, builders, architects, building officials the differences that pertain to the Florida Accessibility Code for building construction and the Fair Housing Act because people are mixing and matching these two requirements without the understanding of one versus the other.
- Project #11: Study of vehicles carrying people with accessible needs such as width of spaces and rear entry vans that put ramps down in drive aisle.
- Project #17: Variable Frequency Study: Study on variable frequency drive system on anything over 3 horsepower compared to a single speed motor and the cost efficiency.

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 8 projects meeting the criteria for funding required approximately \$572,546 to fully and/or partially fund them, and there is \$400,000 available for

funding, leaving a funding deficit of \$172,546 for the full and/or partial funding of the 8 projects. In addition, the projects with legislative directive cost approximately \$210,000 leaving approximately \$190,000 available for funding the remaining highest ranked research projects.

Following presentations and public comments the TAC chairs ranked each of the 8 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. Ranked #1: Project 13: Evaluate the economic impact of the delayed code provisions.
The TAC voted 9-0 to fund #1 the ranked project at \$95,000.
2. Ranked #2: Project 15: Estimate the cost impact of the 2015 International Building Codes changes.
The TAC voted 9-0 to fund the #2 ranked project at \$110,000.
3. Ranked #3: Project 12: Evaluate an approve method for achieving 1 hr. fire resistance rating under side of projections – focus on zero lot line – come up with details that is tested and evaluated. Evaluate an alternative to the zero lot line provisions.
The TAC voted 9-0 to fund the #3 ranked project at \$30,000.
4. Ranked #4: Project 4: Continuation of corrosion of roofing fasteners.
The TAC voted 9-0 to fund the #4 ranked project at \$54,127.00.
5. Ranked #5: Project 5: Document field cases of attics sealed with spray foam insulation.
The TAC voted 9-0 to fund the #5 ranked project with the funds remaining from the \$400,000.00 after funding the four highest ranked projects (~\$111,000.00)
The TAC voted 9-0 to apply any additional funding that may become available to fully fund Task 1 and 2 of this project (an additional \$27,767.00)
6. Ranked #6: Project 16: Electrocution Prevention Study: Study on how many public and private pools have high voltage lighting? What is the cost to change to low voltage and the time frame to change in the next 5 or 10 years?
The TAC voted 9-0 to recommend that this project is a priority and should be conducted. In addition, the Commission should provide funding to assist with the project ~\$5,000.
7. Ranked #7: Project 1: Measure temperature, humidity and CO2 levels in new homes.
This project will only be the last to be funded, only if the other 7 projects are funded based on the TAC chair' recommendations.
8. Ranked #8: Project 2: Residential hot water distribution.
The TAC voted 9-0 to recommend that this project be fully funded for \$20,728 if additional funding becomes available and after fulfilling the funding priorities of projects 1-6.

(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 2015-2016 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, and staff administering and overseeing the research, and negotiating contracting and scoping 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 2015-2016 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, 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 3:25 PM on Monday, August 17, 2015 following an unanimous vote of 9 – 0 in favor of adjournment.

ATTACHMENT 1
AUGUST 17, 2015 MEETING AGENDA

Agenda
Technical Advisory Chairpersons (TAC)
10:00 A.M. August 17, 2015
Plaza Historic Beach Resort and Spa
600 North Atlantic Boulevard
Daytona, Florida

- 1. Welcome and Opening Roll Call** **Chairman**
Review and Approval of Agenda and August 21, 2014 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
Roofing	Brian Swope
Special Occupancy	Darrell Phillips
Swimming Pools	Vacant

Definitions for “Research” and “Technical Enrichment”

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.

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.

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: Measure temperature, humidity and CO2 levels in new homes
- Priority 2: Residential hot water distribution
- Priority 3: Residential kitchen exhaust ventilation

Mechanical Technical Advisory Committee

- Priority 1: Measure temperature, humidity and CO2 levels in new homes
- Priority 2: Residential kitchen exhaust ventilation

Roofing Technical Advisory Committee

- Priority 1: Continuation of corrosion of roofing fasteners
- Priority 2: Document field cases of attics sealed with spray foam insulation

Structural Technical Advisory Committee

- Project 1: Cost difference study between the different types of shutter systems vs. an impact resistant system to understand the advantages and disadvantages of these systems.
- Project 2: Study of corrosion, load and deterioration issues on different types of balconies

Electrical Technical Advisory Committee

Research acceptable methods for remediation of aluminum wire connections in existing/older homes in a remodeling

Plumbing Technical Advisory Committee

Study pipe sizing with roof drains and the problems with roofs collapsing due to pipe failure.

Accessibility Technical Advisory Committee

- Priority 1: Consider the potential of a workshop to give guidance to help explain to the general public, builders, architects, building officials the differences that pertain to the Florida Accessibility Code for building construction and the Fair Housing Act because people are mixing and matching these two requirements without the understanding of one versus the other.
- Priority 2: Study of vehicles carrying people with accessible needs such as width of spaces and rear entry vans that put ramps down in drive aisle.

Fire Technical Advisory Committee

Evaluate an approve method for achieving 1 hr. fire resistance rating under side of projections – focus on zero lot line – come up with details that is tested and evaluated. Evaluate an alternative to the zero lot line provisions.

Code Admin Technical Advisory Committee

- Project 1: To evaluate the economic impact of the delayed code provisions
- Project 2: To estimate the cost impact of the 2015 International Building Codes changes

Swimming Pool Technical Advisory Committee

Priority 1: Electrocution Prevention Study: Study on how many public and private pools have high voltage lighting? What is the cost to change to low voltage and the time frame to change in the next 5 or 10 years?

Priority 2: Variable Frequency Study: Study on variable frequency drive system on anything over 3 horsepower compared to a single speed motor and the cost efficiency.

5. TAC evaluation of each research project

Prioritization of proposals based on immediate needs.

6. Adjournment

Chairman

ATTACHMENT 2
RESEARCH WORKPLAN AND TIMELINE

RESEARCH WORKPLAN	
TIMELINE	MILESTONE
June 25 - August 7, 2015	Convene TACs to solicit research topics
August 7, 2015	Compile outcomes of TACs meetings/various research topics by TAC.
August 7, 2015	Make available list of research topics/Scope of Work for review at the Chairs meeting.
August 17, 2015	Chair meeting to consider and recommend list of research topics for consideration by the Commission.
August/Sept. 2015	Solicit qualified entity to do the research.
October 2015	Draft contract for research and implementation.
November 2015	Start contract (contract time frame 1- year). Funding is contingent upon budget appropriation and must be spent within the Fiscal Year.
June 15, 2016	Complete research or partial research.

ATTACHMENT 3 RESEARCH PROPOSAL COSTS

Energy Technical Advisory Committee

- Priority 1: Measure temperature, humidity and CO2 levels in new homes
{Energy and Mechanical TAC P1} (FSEC) [\$118,924]
- Priority 2: Residential hot water distribution
{Energy TAC P2} (FSEC) [\$20,728]
- Priority 3: Residential kitchen exhaust ventilation
{Energy TAC P3 and Mechanical TAC P2} (FSEC) [\$40,128]

Mechanical Technical Advisory Committee

- Priority 1: Measure temperature, humidity and CO2 levels in new homes
- Priority 2: Residential kitchen exhaust ventilation

Roofing Technical Advisory Committee

- Priority 1: Continuation of corrosion of roofing fasteners
{Roofing TAC P1} (UF) [\$54,127]
- Priority 2: Document field cases of attics sealed with spray foam insulation
{Roofing TAC P2} (ORNL/UF/FRSA) [\$138,767 for Tasks 1 and 2]

Structural Technical Advisory Committee

- Project 1: Cost difference study between the different types of shutter systems vs. an impact resistant system to understand the advantages and disadvantages of these systems.
{Structural TAC 1} (TBD) [\$TBD]
- Project 2: Study of corrosion, load and deterioration issues on different types of balconies.
{Structural TAC 2} (TBD) [\$TBD]

Electrical Technical Advisory Committee

- Research acceptable methods for remediation of aluminum wire connections in existing/older homes in a remodeling
{Electrical TAC 1} (TBD) [\$TBD]

Plumbing Technical Advisory Committee

- Study pipe sizing with roof drains and the problems with roofs collapsing due to pipe failure.
{Plumbing TAC 1} (TBD) [\$TBD]

Accessibility Technical Advisory Committee

- Priority 1: Consider the potential of a workshop to give guidance to help explain to the general public, builders, architects, building officials the differences that pertain to the Florida Accessibility Code for building construction and the Fair Housing Act because people are mixing and matching these two requirements without the understanding of one versus the other.
{Accessibility TAC P1}(TBD) [TBD]
- Priority 2: Study of vehicles carrying people with accessible needs such as width of spaces and rear entry vans that put ramps down in drive aisle.
{Accessibility TAC P2}(TBD) [TBD]

Fire Technical Advisory Committee

Evaluate an approve method for achieving 1 hr. fire resistance rating under side of projections – focus on zero lot line – come up with details that is tested and evaluated. Evaluate an alternative to the zero lot line provisions.
{Fire TAC 1}(TBD) [~\$30,000]

Code Administration Technical Advisory Committee

- Project 1: To evaluate the economic impact of the delayed code provisions.
{Code Administration TAC 1} (FSEC: Blower Door/Mechanical Ventilation/Fire Elevator) [\$95,000]
{Code Administration TAC 1a} (FSEC: Blower Door) [\$17,000]
- Project 2: To estimate the cost impact of the 2015 International Building Codes changes.
{Code Administration TAC 2} (UF) [\$110,000]

Swimming Pool Technical Advisory Committee

- Priority 1: Electrocutation Prevention Study: Study on how many public and private pools have high voltage lighting? What is the cost to change to low voltage and the time frame to change in the next 5 or 10 years?
{Swimming Pool TAC P1}(TBD) [~\$5,000]
- Priority 2: Variable Frequency Study: Study on variable frequency drive system on anything over 3 horsepower compared to a single speed motor and the cost efficiency.
{Swimming Pool TAC P2}(TBD) [TBD]