

In-Building Communications Meeting Summary

December 1, 2021 9:00 a.m. – 10:35 a.m.

Virtual Meeting: <https://vadhcd.adobeconnect.com/va2021cdc/>

ATTENDEES:

VA Department of Housing and Community Development (DHCD) Staff:

Cindy Davis: Deputy Director, Division of Building and Fire Regulations
Jeanette Campbell: Administrative Assistant, BFR
Jeff Brown: State Building Codes Director, State Building Codes Office
Richard Potts: Code Development and Technical Support Administrator, SBCO
Travis Luter: Code and Regulation Specialist, SBCO
Paul Messplay: Code and Regulation Specialist, SBCO
Florin Moldovan: Code and Regulation Specialist, SBCO
Stephen Reynolds: Training Specialist, Virginia Building Code Academy
Kyle Flanders: Senior Policy Analyst, Policy and Legislative Office

Study Group Members:

Jamie Wilks: Madison County Building Official; VBCOA committee member; prior Building Official in Matthews County; Retired from Norfolk fire department
Robert (Jonah) Margarella: Architect at Baskervill (Studio Director); 24+ years in architecture; member of SBCTRB
Dwayne Tuggle: Amherst, VA Mayor; VA State Police-retired
Steve Shapiro: Retired Building Official City of Hampton - 34 years; LLC Shapiro Associates; AOBA; prior President of ICC
Dana Buchwald: Senior Account Manager (in-building signal for emergency responders) at Backhaul Engineering
Debbie Messmer: Virginia Department of Emergency Management
Troy Knapp: Electric Plan Reviewer with VA DGS, Division of Engineering and Buildings; prior Electric Plan Review Engineer 13 years William & Mary College; 20+ years Electrical Engineer
Robert Melvin: VRLTA-Restaurant, Lodging & Travel Association, Director of Government Affairs
Andrew Milliken: VFCA, VFSB Chairman of Fire Codes and Standards Committee, (also submitted a proposal last cycle on this issue)
Tammy Breski: Broadband Project Manager, VA DHCD Division of Community Development; prior Verizon Construction Manager

Other Interested Parties:

Ron Clements
Ernie Little
Linda Hale
Sean Farrell
Todd Strang

Study Group Members not in attendance:

Patrick Green: Virginia State Police
Jodi Roth: Virginia Retail Federation
Gerry Maiataco: Virginia Fire Prevention Association
Tread Willis: International Association of Electrical Inspectors-VA
Jay Davis: Virginia Department of Fire Programs
Jim Crozier: Virginia Association of Counties

AGENDA AND DISCUSSION ITEMS: (Power Point Presentation Slides with additional information indicated)

Presentation is on the DHCD website, with a link on the cdpVA website

1) Welcome

Jeff Brown: General Housekeeping- Directed participants to the Adobe Connect presentation area, the attached files and microphone settings. Attendants were asked to mute microphones until they wish to speak, identify themselves as they speak, be respectful and be concise in their comments. Use the 'Raise Hand' feature in the meeting room to speak. Cameras will not be used in these virtual meetings. All meetings are public, but generally, discussions will be among study group members.

2) Introductions

Jeff Brown: DHCD staff introductions: Cindy, Jeff, Richard, Paul, Florin, Jeanette from BFR.

Study Group members made personal introductions. (slide)

Study Group members will be indicated as such in the Adobe Connect meeting participant list with 'SG' after their names. If anyone outside of the group would like to join the email list, they should contact sbco@dhcd.virginia.gov with their request.

Robert Melvin: He is not sure how many meetings his group can participate in, due to the General Assembly legislative process (Jodi as well). Jeff Brown acknowledged this and said he would try to work around those dates and get some meetings in before Session begins, and will wait until after Session ends to start the General Workgroup meetings in March.

3) Overview of VA Code Development Process

Jeff Brown: Showed participants (3 slides) indicating tentative meeting dates, Code Development Process flowchart and cdpVA website overview.

The Virginia codes are usually updated every 3 years. The 2018 code cycle was completed last year, and codes became effective in Virginia on 7/1/21.

The 2021 cycle to integrate the newest I-Codes into the Virginia code started with submitting the Notices of Intended Regulatory Action (NOIRA), which was published in the Virginia Register of Regulations. Study Groups will be conducted for special topics, in order to identify issues, review proposals and get recommendations before submitting them to the Board of Housing at the end of the phase. Files for discussion can be found in lower left box of this Adobe meeting site, including a flowchart of the regulatory process, together with this presentation (all slides). These files can also be found on cdpVA.

The BHCD in October approved a policy to limit proposal submission only to the proposed phase. The final phase of the development process is limited only to corrections, technicalities or error revision; it is not intended for new changes, which was previously allowed, but it caused too many complications and delays to the process. If someone wants to propose a change during the final phase, it will instead be pushed to the next code change cycle. The cdpVA website (slide) can be used to submit change proposals. It also includes historical data from the 2015 and 2018 cycles, and other important information such as meeting dates, agendas, summaries, development cycle flowchart, base documents, etc...

Study Groups (slide) are generally small - about 12-15 group representatives. They meet regarding specific topics until discussions end. Any potential proposals resulting from the Study Group discussions will be included in the General Workgroup Agenda(s) for review and discussions by stakeholders, prior to BHCD consideration. The Study Groups will then disband. This IBEC group is a Study group. Recommendations we may make will be based on how discussions proceed and what proposals are submitted to this group and/or what proposals we submit as a group.

Sub-Workgroups (slide) review proposals according to topic, which are generally broader in scope than the Study groups. They will submit recommendations based on proposals received or created within the group to

the General Workgroups, who make recommendations and submit to the BHCD. Currently, the Sub-Workgroups are: Energy, Statewide Fire Prevention Code and Resiliency.

General Workgroups (*slide*) consider proposals submitted by anyone and the meetings are public, open to all. The proposals go to the BHCD in blocks and those that are unanimously approved and disapproved are voted on by the BHCD in blocks. Proposals that did not reach a consensus for approval or disapproval are voted on individually by the BHCD. The General Workgroups for the 2021 cycle will start to meet in March.

4) Background / History

Jeff Brown: In Building Emergency Communications (IBEC) (*slide*) is 2-way emergency responder communication coverage inside of buildings. Starting in 2021, the I-Code term has been changed to Emergency Responder Communications Coverage (ERCC). This is used to indicate the ability to communicate in a building, not necessarily a specific communication system.

This group will also discuss Emergency Responder Communication Enhancement Systems (ERCES). ERCES may be used in buildings where the signal strength does not meet minimum requirements. This is a system made up of a donor antenna in-tower with a bi-directional amplifier to boost the signal. Coaxial cable or fiber medium is used to distribute the signal throughout the building. There are additional information sources online.

House Bill 2529 in 2003 (*slide*) was initiated as a result of problems identified in the 9-11 emergency response. BHCD was directed to develop codes for new building construction to ensure the operation of communications used by emergency personnel, or provide equipment to allow such emergency communications.

HJR 588 in 2003 (*slide*) directed a taskforce in Virginia to study the feasibility of adopting requirements to ensure that buildings were constructed and equipped to permit effective radio communications inside the buildings. The group agreed that local jurisdictions are responsible for delivering adequate radio signals to the exterior of a building before requiring the installation of emergency communications requirements to overcome signal degradation inside the structure.

2004-2007 Virginia ad-hoc committee (*slide*) compromise proposal was approved by the BHCD for the 2006 Virginia Construction Code (VCC), which remains mostly unchanged today.

2018 Code Development Cycle (*slide*) The BHCD considered proposals to amend the VCC emergency communications requirements. One was approved: (B916.1-18) however, two were not approved: (B916-18 and B918.1-18). The Board decided there needed to be a more in-depth study and discussion, which is what this Study Group will be doing.

The objectives of this Study Group (*slide*) are to gather information, identify issues with current code, identify areas of agreement or disagreement, support and opposition, identify possible improvements and submit proposals (if any), summarize findings and review any proposals related to the topic (if any) submitted throughout the 2021 cycle.

VCC codes are available for free online: codes.iccsafe.org/codes/Virginia (*slide*)

2021 IBC requirements (*slide*) of Section 918 (ERCC) states that two-way ERCC shall be provided in all new buildings in accordance with Section 510 of the International Fire Code (IFC). This is the only model we have.

2021 Section 510 IFC (*slide*) also states that two-way ERCC shall be provided in all new buildings (with 3 exceptions). It also includes technical requirements of the systems to be used. These systems also need to be designed in accordance with NFPA 1221, section 926, and they also need to be UL 2524 listed.

2018 requirements in VCC Section 918 (*slide*) has 6 listed exceptions: 1) Use groups, 2) Types IV and V, 3) One-story buildings less than 20k sq. ft., 4) Government owned or leased spaces with other security requirements approved by a Building Official, 5) Owner has a technical documentation form stating that the building does not impede signals 6) Building that doesn't provide the equipment needed to operate the system.

2018 VA requirements 918.1.1, .2, .3... and 918.2 (*slide*) regarding installation, operations, inspection and acceptance test for equipment. The building owner is not responsible for everything – they do need to provide

infrastructure (cable installation) and space for the locality to work with the equipment. The locality should be responsible for the system after installation of cables, including operation, maintenance and inspection.

5) Discussion

Jeff Brown: 2018 cycle proposals (*slide*) B916.1-18 approved (adding exception 6); 916-18 not approved; 918.1-18 not approved.

This Study Group will be re-addressing the proposals not previously approved:

B916-18 proposed adding technical requirements (as per NFPA 1221 and 72). Virginia doesn't have any specifics currently. Proposed changing responsibility for installation from locality to building owner.

B918.1 proposed referencing the IFC, while keeping the existing 2015 VCC exceptions for installation.

Jeff Brown: Opened discussion to the floor for questions or comments about history and current status:

Dana Buchwald: In section 918, exception #3, what is the basis for this exception (+1 story over 20k sqft). Staff responded that this threshold was used to correlate with sprinkler requirements for buildings of similar size.

Troy Knapp: He is a Plan Reviewer. He says that not having technical requirements makes it difficult for planners and builders to follow. He agrees that this needs some clarification.

Jonah Margarella: Why were the 2 proposals open for discussion not approved? Jeff Brown says that one reason was cost and who would be responsible to pay, another may have been just because the group was too large with too many different sides and the BHCD wanted a Study Group to look into it further.

Cindy Davis: She thinks that AOBA had big concerns based on previous issues. Primarily: who is responsible? Especially for existing buildings, to upgrade or maintain older systems. Steve Shapiro agreed with Cindy.

Steve Shapiro: Regarding the reason for exception #5, he's unsure of what the wording entire structure or "portion thereof" would mean specifically. Jeff Brown said there may be only a portion of the building where communication fails.

Jamie Wilks: He thinks the current code section is good starting point, but it's important to identify the standards to adhere to. He also says some smaller localities would have trouble paying for these systems.

Andrew Milliken: As a starting point, it would be important for this group to look at what prior discussions were, especially the financial burden for localities. He is concerned that the existing code requirements did not achieve the original intended goal.

Robert Melvin: He understands Andrew's concerns, but also thinks that businesses would not be able to bear the financial burden at this time (COVID), inflation, etc. While we need to ensure safety protocols, hotels and restaurants, etc., will not be able to handle the financial burden and many didn't get any financial government assistance. Jeff Brown asked for any others to try to provide stats that could help with the financial discussion.

Andrew Milliken: Wants to clarify that most of this discussion is about new buildings. We should note that it will not be retroactively required for existing buildings.

Steve Shapiro: Asked about the financial information Jeff Brown is looking for; will the data need to be in by the 14th, and should we be more specific on what exactly the cost would be comprised of? Jeff Brown says it's not required by 14th, and he knows there have been different ideas about what the #s would include, as well as how it would be presented. He is not expecting that we will come to consensus about financial recommendations during the course of this Study Group.

6) Assignments and Next Steps

Jeff Brown asked for everyone to review and research the information provided, ask questions, raise concerns, gather additional information, and submit for the next meeting. (*slide*)

7) Next Meeting

December 29th 9am-3pm with a one hour lunch break from 12-1. (*slide*) There will be more discussion about the current issues at hand, rather than reviewing prior data. Adobe Connect will continue to be used for virtual meetings. Jeff Brown thanked everyone for their participation.