Residential Sprinklers Study Group

Meeting Summary: March 25, 2022 9:00 a.m. to 11:40 a.m.

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

ATTENDEES:

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

Jeff Brown: *State Building Codes Office Director, State Building Codes Office (SBCO)*
Richard Potts: *Code Development and Technical Support Administrator, SBCO*
Paul Messplay: *Code and Regulation Specialist, SBCO*
Florin Moldovan: *Code and Regulation Specialist, SBCO*
Jeanette Campbell: *Administrative Assistant, Building and Fire Regulations (BFR)*
Kyle Flanders: *Senior Policy Analyst, Policy and Legislative Office*

Study Group Members:

Andrew Clark: *Homebuilders Association of Virginia (HBAV)*
Keith Johnson: *Virginia Fire Chiefs Association (VFCA), Virginia Fire Services Board (VFSB) Vice Chair, and member of the Board of Housing and Community Development (BHCD)*
Jimmy Csizmadia: *Secretary of Virginia Fire Prevention Association (VFPA) and Inspector with the Prince William County Fire Marshal's Office*
Garrett Dyer: Director, *Virginia Department of Fire Programs (VDFP)*
Mike Poole: *American Institute of Architects (AIA) Virginia and Principal of Poole & Poole Architecture*

Other Interested Parties:

Andrew Milliken: *VFCA, VFSB Chairman of Fire Codes and Standards Committee*
Craig Toalson: *HBAV*
Judy Hackler: *Executive Director, Virginia Assisted Living Association (VALA)*
Jeffrey Shapiro: *International Code Consultants*
John Ainslie
Sean Farrell: *Prince William County*
Randy Grumbine: *Virginia Manufactured and Modular Housing Association (VAMMHA)*
Robby Dawson: *National Fire Protection Association (NFPA)*
John Walser*: Fairfax County Fire & Rescue*
Glenn Dean

Study Group Members not in attendance:

Ron Clements: *Chesterfield Building Official, member of VBCOA*
Mike Nannery: *Assistant Director of Engineering and Development for Chesterfield County Utilities*
Mike Eutsey: *First Vice President of Virginia Building and Code Officials Association (VBCOA) and Assistant Chief Building Official for Hanover County*
Reid Walters: *Town Manager of the Town of Independence*
Robbie McCraw: *Carroll County Board of Supervisors and E&L Diamond Electric, Heating, Cooling and Plumbing*
Meredith Raetz: *Planning Engineer with Virginia American Water*
Overton McGehee: *Habitat for Humanity*
Ellis McKinney: *Virginia Plumbing and Mechanical Inspectors Association (VPMIA)*

AGENDA AND DISCUSSION ITEMS:

Welcome

Jeff Brown: Agenda and documents were sent earlier to group members, and are also in the file pod. The meeting is being recorded. DHCD staff can help with any technical problems. There will be a break every hour, and an hour for lunch from 12-1 if the meeting runs that long. Only Study Group members will discuss topics in the meeting, but others are welcome to sit in and listen and contact Study Group members outside of the meeting.

Discussion

Jeff: The last meeting of this Study Group was January 11th and the meeting summary was sent out and posted shortly thereafter. One of the assignments from that meeting was to submit some samples of plans showing sprinkler system designs that the group could look at. It took some time to collect the plans, and in addition, the General Assembly was in session at the same time, making it more difficult for Study Group members to collect, submit and review documentation. There should be adequate time in this meeting to have open discussion about anything of interest that's the group would like to discuss. By the end of the meeting today, the group should have a good idea if another meeting will be needed or if everything has been covered sufficiently. Once the meetings have concluded, a report will be generated for the Board of Housing and Community Development.

Andrew Clark: Representing the Home Builders Association of Virginia (HBAV). He was not able to attend the first 2 meetings of this Study Group, however he submitted some comments to DHCD, which were sent to the group. He wants to ensure that the comments he submitted will be part of the record, even though he was not at the prior meetings in person. He does feel that there is some data lacking, which he is prepared to discuss today.

Jeff: The documents Andrew sent recently did come in a bit late, however they were forwarded to the entire group. The meeting agenda was not changed to accommodate the new materials Andrew submitted, however Andrew is welcome to address them if they are relevant to any of the topics that we are discussing, or towards the end of the meeting in the "Other" section of the agenda, if they were not already discussed during other parts of the meeting. If there is more time needed for other members to review the documents, another meeting can be scheduled to allow time to review them and continue the discussion. There have not been any official code change proposals submitted in cdpVA yet, so that is a discussion point on the agenda today. The group may want or need to meet again if there are any residential sprinkler proposals submitted, so that the group can discuss the proposals.

Keith Johnson: Andrew provided materials 18 hours prior to the meeting, which he didn't have time to review. He thinks the information that Andrew provided was already covered in the previous Study Group meetings. He thinks the materials Andrew provided are philosophical in nature, and the group has moved past that topic into actual fact finding and data. He also said that the effort of the group was not about affordable housing, but about looking at sprinklers, cost estimates and pros and cons of installing sprinklers. He said he will probably take the time to read what Andrew submitted and write something of his own in response. He's concerned that there are not enough Study Group members on the meeting with actual experience of installing sprinklers.

Jeff: The documents did come in late, so they are not on the agenda, but they have been provided to the group. Andrew is welcome to discuss any information related to the topics and present the documents he provided, as time permits. If there are any documents or information that the group needs more time to review before discussing, those topics can be continued at the next meeting.

Andrew: Speaking to Keith – his comments earlier were not made in order to be negative or to steer the discussion in any way. His group is small and trying to focus on a regulatory process at the same time as the General Assembly session has been difficult. The intent of the documents is to give the group information about the housing industry's philosophy and how they approach discussing code proposals in general and specifically about fire sprinklers. He has heard some in these types of meetings talk about the builder's profit motive. He wanted to get on the record to dispel some myths. The industry vets proposals based on data.

Jimmy Csizmadia: The documents came in late, and he hasn't read them yet. He wants to talk about the agenda items and the plans he submitted.

Jeff: The group will stick to the agenda, but any documents with merit that have been submitted should be discussed and if anyone needs additional time to review and wants to have additional discussions after their review, we can continue the discussions at the next meeting if needed. We have had other members submit documents well past the requested submittal deadline for a previous meeting and included those in the discussions.

Contractor Licensing Requirements

Jeff: This was discussed at a previous meeting and there was some question as to what licensing requirements were needed to install the different types of sprinkler systems. DHCD reached out to DPOR, and confirmed that provisions and exceptions in the DPOR licensing requirements around the plumbing contractor certification are specific to systems complying with Section P2904 of the IRC/VRC. That is the only system that can be installed by a plumbing contractor in Virginia. 13R or 13D systems cannot be installed under a plumbing contractor license.

Townhouse Sprinkler Plans

Jeff: Jimmy submitted a few sets of plans, which are included in the meeting documents. The group won't get into the details of sprinkler design, but the plans show the general layout and requirements. It should help to look at what is required for certain size rooms and what the plans would look like. Ron Clements brought this up at a previous meeting and thought it would be helpful to get an idea of what the plumbing inspector would look at, and if it would require any additional staff or other resources on his end. There are water flow calculations on the plans which should also tie into discussions about water needs. The first plan is titled "Lots 1-10 FP1".

Keith: It looks like a very large building. This should be required for sprinklers under the IBC. In Loudoun, it's hard to get answers from the sprinkler contractors; there's a lot of competition and they are not very forthcoming with plans. He spoke to an estimator from Nobel Fire Protection in MD about a local project with 30 sprinkler heads. The costs were about $3,000 for the system, $70 for the permit and $150 for the PE sealing the drawings. He noted their name and number in the documentation he supplied. He spoke with Andrew over the last few days about some of the water costs in Loudoun. A 1-inch meter is $285, a 3/4-inch meter is $240 and the connection fee for either is $7,395. These prices are on the Loudoun water website.

Andrew: Meter size was something we tried to look into. A good portion of the cost is probably the water connection fees. He appreciated the numbers provided by Keith from Loudoun. Water connection fees in some localities run from $2,300 to $18,000. Connection fees, to go up a meter size, can jump significantly. He is wondering if the plans they have for review are adaptable to a smaller meter size.

Keith: The group needs to be careful about which type of system they are referring to. A P2904 system doesn't require all the same things that a 13R requires. 13R is much more expensive. Systems built under the IRC are similar to adding other plumbing systems. 13R is not customary for residential housing, where domestic water is used. He noticed in one of the documents Andrew supplied, the estimates seemed very inflated. One estimate was using a 6-inch connection, which is way more than is needed in a residential building.

Garrett Dyer: He does think the systems should be identified in order to have a more constructive discussion.

Jeff: All of the systems discussed (13R, 13D and P2904) are options under the VRC, but most likely 13D and P2904 systems would be used. 13R is probably not going to be used as it will likely be more expensive. Most of the plans that were submitted are designed to 13D.

Andrew: Are the plans submitted for 1-inch meter size? The connection fees seem low in Loudoun, but could add significant costs in other places.

Jeff: Looking at flow rates in the sample plans could help answer questions about meter sizes required.

Jimmy: For the most part, the 13D and P2904 systems will be a 3/4-inch meter, some might be 1-inch. He sees 13D systems with 3/4-inch tie-ins from the ground to the backflow preventer then the sprinkler system branches off. If more pressure is needed, a 13D would require nothing more than a pool pump, which is about $200. The discussion is getting into the weeds. Townhouses do not require a 13R system. 13D and residential sprinklers are going to give occupants time to get out in the event of a fire. The systems are not designed to save the structure, but to prevent flash-over and give occupants time to get out of the building. These plans

are not for what is put into townhouses in Prince William, they are usually installed in single-family residential occupancies. If the houses are closer than 25 ft. apart, there's a proffer that the houses get sprinklers.

Mike Poole: Understands what Jimmy and Andrew are saying. Every location isn't Loudoun County. There are active projects in many other localities and connection fees vary wildly between all of the counties. It costs about $4-5k for a connection fee in Henrico to start with. Empirical data would be good, if we can get it.

Jeff: The next set of plans is more for townhouse-style residential occupancies. There are more details on this plan which should help with the discussions.

Keith: He's confused about the direction of the conversation related to connection fees. If there's a domestic water connection for plumbing, it's already there for 13D or P2904 sprinkler systems. There is no separate connection fee. The only cost difference he thinks there might be is with a change from 5/8 to 3/4. One inch isn't required for residential occupancies. A typical 5/8-inch meter will flow 20 gallons per minute, which will operate an adequate sprinkler system in most homes. A 3/4-inch meter is not usually required, unless the flow is over 30 gallons per minute. Jeff Shapiro provided a fact sheet from the Fire Sprinkler Coalition, which was shared with the group in a previous meeting. That document had all of this information.

Andrew: Nobody is saying that there is a separate connection fee, but it would require a larger meter.

Mike: These numbers are from 2019 and can probably be double these days. Meters do have to be upgraded. This should be an empirical number that we can get our hands on.

Keith: Has any 2904 or 13D system ever needed a one inch meter?

Andrew: The numbers provided are what builders have put in. The Richmond region builders confirmed 13D. It is happening. It's not that a separate meter would be needed, but an up-sizing would be.

Keith: Wants to see the evidence. He disputes that 1-inch meter and 6-inch dedicated lines are needed. If there's a contractor who is upsizing to a 1-inch meter, evidence should be provided to the group, to discuss. Residential sprinklers are not required in Virginia. He works with a lot of Maryland contractors, who install systems every day, and do a lot of work in northern Virginia. He thinks they should rely on their data.

Andrew: That's not accurate, to say that we should base everything off of northern Virginia. People are doing it in other areas as well. The estimates given are for specific projects. Different parts of the state have different costs.

Keith: He still wants to see evidence.

Andrew: It's challenging for a builder to be part of this dialogue, because they would get beat up. Builders do go to other meetings, but they don't want to be involved in the meetings about sprinklers.

Keith: Tried to sit down with Andrew earlier, and couldn't get the time with him.

Andrew: There's a lot going on in his professional and personal life. Last time he engaged with Keith, he received a twitter barrage from all across the country. He's hesitant to engage in a conversation.

Jeff: It's been slow going because of the General Assembly session. If information is still needed, it needs to be submitted and discussed by this group. Sample sets of plans have been provided. The discussion should be around what is submitted. He doesn't want to prevent anything from being shared or discussed. It would be great if utility folks were on the call or if they could be consulted to bring back some information related to water supply and meter requirements and fees. Based on the sample plans that have been provided, they can be asked what would be required for the particular designs.

Keith: Connection fees from Fairfax are $1,430 for 5/8; $1,870 for 3/4; and $1,960 for 1 inch. Meter costs are $4,400 for 5/8; $8,800 for 3/4; $14,000 for 1 inch. There's a special note for a 13D system, which is $4,400.

Jimmy: Back to the plans. It was hard to find plans in Virginia because they're not required in Virginia. He got the plans from Maryland. He would like to see Richmond area plans. He thinks they should talk about what they have on the table now. He usually sees 3/4 meters in single family homes. Some are bringing in 1.5 inch water lines from the street. They may have a 3/4 inch meter, but they're putting in 1.5 inch into the house. The group should look at coverage area. It's a 13D system to help save occupants, not the structure. Why would anyone not want to do that?

Jeff: As far as this group looking at what is required in a P2904 sprinkler system design, he doesn't think it matters where the plans come from - Virginia or Maryland. P2904 systems would look the same. The plans will help identify what the average water supply requirements for these systems are and the group can discuss how that relates to utility requirements for meters and fees throughout the state.

Mike: There are other states besides Maryland. Most other jurisdictions don't require sprinklers. Maryland and California are early adopters. An NAHB document updated yearly shows that only a few localities require this.

Keith: Information submitted previously were from localities in other states such as Pennsylvania, Arizona and Nevada. He agrees that the group should look at other localities that have done this.

Mike: There's a difference between localities and state-wide mandates.

Jimmy: Almost everything they have been doing is 3/4-inch tie-in. The 3/4-inch meters are T110 or T10 from Prince William Water Authority. When the systems are installed, there's a 4 head flow test performed and 9 times out of 10, they get twice as much water than they need from a 3/4-inch meter.

{Break 10:10 to 10:15}

Jeff: Looking again at the plans. The second set of plans is titled "Lots 414-418". DHCD also provided specification documents for sprinkler heads that were specified in the design. The other plans provided for lots 226-232 and for lot 71 can be reviewed as well, if needed. The last set of plans submitted was for a 13R system. He asked the group which set of plans they wanted to review.

Jimmy: These plans were provided to get something on the table for the group to look at. They do a good job of laying out what would be required for a townhouse. He can answer any questions and go back to the contractor if needed. Although most of the plans do show a 1-inch meter, he has done thousands of these in Prince William County, and most are using 3/4-inch meters. There's no cost difference, besides extra piping.

Jeff: The group can continue this discussion with people from the utilities side. If information from across the state is gathered, they can assist with reviewing the meter options and determining at what point larger meters are needed. Looking at these plans, the 20-30 gallon per minute range seems average.

Jimmy: From 18-22 gallons per minute is normal. Again, most testing showed more than adequate flow, even without a separate pump. The few that did use a pump had nothing more than a pool pump, which is simple and inexpensive to install. Labor is probably the most expensive part.

Jeff: Ron Clements and VBCOA wanted to see some samples to give them an idea of what would be required for inspection and plan review. I.e. is a plan review required and can the plumbing inspectors review and inspect these systems? This discussion will be continued when other group members are available.

Jimmy: Sprinkler systems have static pressure, like a kitchen faucet turned off. There are RPZs that can be put on the systems, that would divert water to the sprinklers and shutoff all other water. It's not required, but it is another safety factor available. He doesn't see how anybody can argue to not put sprinklers in multi-family dwellings. The costs are minute, and in the big picture, it's pennies.

Keith: Residential systems only require a 2 head design, not 4. There's a difference between the water utility cost and what the contractor charges. The meter size is based on the design of the system.

Jimmy: Correct, there is a 2 head flow in 13D systems.

Jeff: There are a few more plans that can be reviewed. If there are no other questions or other discussion, this will be discussed again at the next meeting.

Andrew: If Keith or Jimmy or others want to review the materials he submitted and give their opinions or ask questions, it would be helpful. Builders will be happy to provide responses as to why something was done or clarify any confusion.

Jimmy: Would be happy to that. He hasn't had time to review the documents thoroughly yet.

Keith: Will also review the documents and send his thoughts to Andrew. He wanted to talk about incentives as part of the cost discussion. He has already provided documentation from the Home Sprinkler Coalition with examples. There are incentives in various localities, such as street width reductions, longer dead end streets, decreased turn around for fire apparatus, increased hydrant spacing, reduced access points to subdivisions, etc. These incentives should be a real cost savings to developers and should also be reflected in the final costs to home buyers.

Jeff: That would be a good discussion to have as well. It has already been touched on, and as was mentioned, there was some documentation provided prior to a previous meeting. It will be included in the final report as well.

Andrew: He is interested in the discussion about incentives, and thinks they are helpful. He does wonder how they can incorporate those incentives statewide or if they will remain one-off incentives in specific localities.

Keith: Many of the incentives are already in the statewide building code. There were several that were approved with consensus last year, although there were several others that didn't go forward. He asked if Jeff Shapiro could be a guest speaker in the Study Group to review the P2904 sprinkler system, since he has a lot of experience with the systems.

Mike: There's a difference between incentives and what's already accepted in the code. In a larger building, if he was moving from a 13R to a full 13 system, there would be an extra 25 feet of dead-end corridor length in a multi-family building, which is significant, and would result in a reduction in firewalls. It would be good to see what is actually in the code to incentivize these systems. Locality incentives would be independent of that. He would also be interested to hear what Mr. Shapiro has to say. On another note, flow issues have a lot to do with the height of the building.

Jeff: With no further discussion about plans, he moved the discussion to the cost estimate topic.

Cost estimates

Jeff: Keith submitted more recent pricing. The Virginia townhouse sprinkler survey he previously submitted is also in the file pod. He asked for discussion about costs, benefits and trade-offs, incentives, and any other specifics that are in the code. The topic can also be carried over to the next meeting if needed, in order to bring more information to the table. He put an email on the screen, showing the Nobel Fire Protection estimate which Keith referenced earlier in the meeting.

Keith: Tried to get an actual invoice, but he was not able to do so. The fire sprinkler system is not usually billed for separately.

Jeff: He agrees that it is not feasible for this group to attempt to identify or agree on what the costs will be since system designs and fees will vary greatly based on building design and location, and since the sprinklers are not required in Virginia. Anything around cost that is provided to the group will be noted in the final report, with the understanding that the data is limited at this time.

Andrew: The numbers can vary widely by region and locality. Ongoing discussion about invoices and cost estimates may not be fruitful at this point.

Keith Agrees with Andrew. He supplied a pricing sheet from Northern Virginia, updated in 2020 by Jeff Shapiro. He asked again if Jeff if Shapiro can come in for a 30 minute presentation about sprinkler systems to the group. He asked if they could have a poll of the members for support.

Andrew: Due to the differences in each locality, wouldn't the best approach be to continue adding incentives at the local level or in the code for builders or developers to install residential sprinkler systems instead of making it a requirement statewide? Builders are being pushed to add housing to the middle market, and a statewide mandate in the code would definitely add to the problem of affordability.

Keith: Local incentives can't be part of the building code. Builders can put in sprinklers now, but they probably won't if they are not required. Buyers look for esthetics in homes much more than they look for safety features such as residential sprinklers.

Mike: Agrees with Keith. International and statewide building codes attempt to make the standards less individualized, and this type of thing may be an unintended consequence of that mandate. Home buyers regularly chose the modern beautiful amenities over things like environmentally friendly or safety related items, and they always want them at no additional cost. The problem with statewide mandates is the vast differences in localities and what they can afford to do.

Andrew: Builders build to the market demand. If buyers want esthetics like hardwood floors and granite counter tops, they are not likely to want to spend additional money on sprinklers. There is not a demand for it, so why would the state then mandate it? Builders are willing to do it for those who want it.

Keith: If that was the argument, many minimum safety standards would not be in place. For example, when someone purchases a car, they don't have a choice about if they get seat belts or not; it's a minimum safety standard. Residential sprinklers have been in the IRC since 2009 and has been removed from the Virginia code. He doesn't see why, because the first thing they want to do is protect people.

Jimmy: Agrees with Keith. It's already in the international code. It all boils down to safety. There shouldn't be a cost on safety.

Mike: He has over 30 projects under construction now, and has for some time. He doesn't believe those buildings are unsafe. This discussion is about making buildings safer. It's not like talking about making a car without brakes. Every other state besides Maryland, D.C. and California have opted out of this. He wants to keep the discussion in perspective. There are probably some tradeoffs that can be discussed and agreed upon. I think you could make an argument that if you made everything a 1-hour fire-resistance-rated assembly it would actually be safer than sprinklers. As Jimmy pointed out, the sprinkler system is there to give the residents more time to get out. He is a fan of sprinklers and has built a lot of occupancies with them, but he wants to make sure that everything is considered before making a mandate across the state. There must be a reason that most states have opted out of this.

Garrett: Wants to speak about the fire services in the Commonwealth. These discussions always come to a crossroads when it comes to providing safety and the cost associated with that. Sometimes the discussions lean towards the enforcement aspects of the fire code. The approach is based on the concept of community risk reduction, which includes enforcement, design and economics. The systems are designed to get individuals out of the homes safely before flashover occurs, and they also provide safety and risk reduction for fire personnel.

Keith: There are 12 states that require residential sprinklers by statewide mandate. West Virginia also has it in their code, but they don't enforce it. He agrees with Mike that Virginia does build safe structures, and he is trying to make structures safer. When the code change was proposed last cycle, it was for sprinklers in townhomes and single family dwellings. He suggested they remove single family dwellings and just include townhomes. The proposal did not pass, by one vote. There does seem to be support for it. The higher risk for townhomes over individual units is that residents have to rely not only on their own safe practices, but also their attached neighbors. He thinks it would be good if code change passes for townhome, so that base costs can be evaluated and considered before possibly including single family homes.

Andrew: The homes being built now are safer than they were in previous decades. One question to ask is what are the characteristics of the structures where these townhome fires are occurring? The households that are cost burdened are predominantly in structures built in the 40s to the 80s. Homes built now don't have those cost burdens. Why isn't this data more on promoting fire safety in older existing structures? Is there a possibility of getting some fire safety information about older structures vs. structures built in the last 10 years? Creating a statewide mandate that would add a few thousand to maybe 15 thousand or so to the cost of housing seems haphazard.

Keith: He understands what Andrew is asking for, but the data is limited. There's currently no requirement for mandatory reporting of data to the federal system. There should be a national data fire system reporting requirement, and the new US Fire Administrator wants to do this. The buildings are being built safer, but it's not about the buildings, it's about the people and what is put into their homes. In the past, there were 11-13 minutes to escape a fire because things were made of cotton and wood. Now, with liquid gas, plastics, synthetics and trusses in the homes, there's only about 3-5 minutes to escape before flashover. Even with the best data in the world, what would be needed to say that there have been too many fires in townhomes and too many people have died?

Andrew: His point about looking at data is to prioritize efforts and see where the most impact on homeowner safety can be made. Prior to the General Assembly, he met with members of the fire services industry regarding the safety of having smoke alarms installed. Nobody is saying that action will be dependent on analyzing how many people have died.

{Break – 11:17 to 11:22}

Code Change Proposals

Jeff: The cutoff to submit proposals is May 1st. There are currently no proposals submitted in cdpVA around sprinklers in townhouses, although some have expressed an interest in putting one together. Group members are encouraged to make sure they submit any proposals by May 1st. Adjustments can still be made to submitted proposals during the June General Stakeholder Workgroup meetings, if needed. DHCD will prepare a summary report of the Study Group discussions, ahead of the June Workgroup meeting. Any proposals submitted can also be reviewed by this group and those discussions included in the report. Regarding Keith's request to provide training, it's a good idea for group members to get further training if there is an interest. He encouraged Keith to setup a meeting prior to the next Study Group meeting, if he wanted to bring in someone to provide some training, and send an invite to the group, so any interested members could participate.

Keith: Asked if Jeff Shapiro could do a presentation during a meeting of the Study Group.

Jeff: Doesn't think that would be helpful to the work of the group, however, Keith can set up a separate meeting outside of the group.

Andrew: Asked Keith what the intent of the presentation from Jeff Shapiro would be.

Keith: The design of the P2904 system and compared to a 13D system. It would be mostly about the technical design and operation aspect. It may lead to discussion of costs, including incentives that are in the code or may be added to the code.

Other

Jeff: Asked Andrew if he wanted to review the documents he submitted.

Andrew: Part of it is about home safety issues in existing vs. new homes. Another part is about cost perspective for the sake of affordability. He would be glad to address any questions offline.

Keith: Affordable housing is important and Virginia does a lot to provide incentives and grants in general. One thing he saw in a document Andrew provided, which hasn't been discussed much, is smoke alarms. He is a proponent of smoke alarms for safety, and Loudoun will install free smoke alarms for residents, which are provided by a FEMA grant. As much as he likes smoke alarms, they don't put out fires.

Andrew: He is in agreement with Keith about smoke alarms. He would like to see more dialogue between builders and fire officials to build awareness and get traction on some relatively easy things that can be done to keep fire personnel and homeowners safe.

Keith: Lastly, he wanted to remind everyone that there is a vulnerable population that needs extra consideration.

Next Steps

Jeff: Thanked everyone for their time and participation. There are still some items that could benefit form additional discussion, and there may be code change proposals related to sprinklers in townhouses submitted before May 1st, so we will plan on having another meeting. Watch for an email regarding the next meeting date in the next couple of weeks and an agenda to come out ahead of the selected meeting date.