CITY COUNCIL CITY OF NEW YORK -----Х TRANSCRIPT OF THE MINUTES Of the COMMITTEE ON HOUSING AND BUILDINGS -----Х NOVEMBER 12, 2015 Start: 10:22 A.M. Recess: 11:43 A.M. HELD AT: COMMITTEE ROOM - CITY HALL BEFORE: COUNCIL MEMBERS: ROBERT CORNEGY, JR. RAFAEL ESPINAL, JR MARK LEVINE KAREN KOSLOWITZ ANTONIO REYNOSO HELEN ROSENTHAL RITCHIE TORRES ERIC ULRICH JUMAANE WILLIAMS World Wide Dictation 545 Saw Mill River Road - Suite 2C, Ardsley, NY 10502

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A P P E A R A N C E S (CONTINUED)

LAURA CAVANAUGH ASSISTANT COMMISSIONER

RICHARD ROACH FIRE PREVENTION INSPECTOR

THOMAS MCCAVINAR BUREAU OF FIRE PREVENTION

THOMAS CANTOR NEW YORK ELECTRONIC SECURITY ASSOCIATION

2 CHAIR WILLIAMS: Good morning everyone 3 thank you for coming. My name is Jumaane Williams, 4 the Chair of the Councils' Committee on Housings and 5 Buildings. I'm joined here today by Council Members 6 Crowley who's bill we will be hearing and Council 7 Member Rosenthal. We're here today to conduct a 8 hearing on proposed Int. No. 56-A, sponsored by 9 Council Member Crowley which will require that of 10 which require that smoke alarms installed in certain 11 residential occupancies at least one be of the 12 photoelectric type. I understand that Council Member 13 Crowley would like to make some speech statements 14 concerning her bill, so I allow her to do so now. 15 COUNCIL MEMBER CROWLEY: Thank you Chair

16 Williams, thank you for holding this hearing and I am 17 Elizabeth Crowley, I Chair the Fire Committee on the 18 City Council, which has oversight of the Fire 19 Department, which is oversight of Fire Safety 20 throughout the City. I introduced this legislation 21 to reduce the number of fire related fatalities in 22 New York City. And we're quickly approaching the 23 cold winter months a time when fatalities typically 24 spark. It is critical we explore the fire prevention

1 COMMITTEE ON HOUSING AND BUILDINGS 4 2 resources available to us right now such as this 3 legislation to make New York City residents safer. 4 Current City laws states that New York City residents must be equipped with either a 5 photoelectric or ionization smoke alarm. But most 6 7 New Yorkers don't know the difference and when they 8 go to a hardware store to buy a smoke alarm, they're 9 not sure whether they're getting the right type of smoke alarm. Leaving many of harms with the cheaper 10 11 smoke alarm none as the ionization. However, studies 12 show that on more than half the time, on greater than 50% chance that an ionization alarm will not go off 13 in time for an individual to survive a smoldering 14 15 fire. I repeat greater than 50% of the chances when 16 there's a fire the smoke does not hit the ionization 17 alarm in time for residents to get out of the house. 18 By requiring at least one photoelectric smoke alarm 19 in all residential units, occupants will be better 20 protected from the fires proven to be the most fatal. 21 Fires with long smoldering stages which cause occupants to suffer from smoke inhalation. 2.2 23 Photoelectric alarms are proven to detect smoke the soonest sounding the alarm to residents of the 24 25 danger. However, the same study show that

COMMITTEE ON HOUSING AND BUILDINGS
 photoelectric alarms provide a 96% chance of
 survival.

Photoelectric alarms are proven to be
detecting the soonest, sound may alarm to resident of
the danger the soonest.

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7 This bill is supported by the super majority of the City Council, over 40 members. 8 Also 9 supported by firefighters, home inspectors and all fire safety experts. All major fire safety 10 11 organization recognizes the benefits of photoelectric 12 technology as well. States such as Massachusetts, Vermont and Maine, Cities in California and Ohio have 13 all passed legislation for photoelectric smoke alarms 14 15 yet we in New York City, a leader for change and new 16 initiative are fallen behind on this critical fire 17 safety measure and this much change and the for it to 18 change is now. One life lost to a fire fatality is 19 one to many. Photoelectric smoke alarms provided the 20 greatest change of survival and all New Yorkers deserve this protection and I look forward to hearing 21 2.2 the testimony from the fire department and I want to 23 thank my colleague again, Chair of the Committee, Council Member Williams. 24

2 CHAIR WILLIAMS: Thank you Council Member 3 Crowley and thank you for providing us additional 4 background information on the bill. I'd also like to thank my staff for the work they did to assemble this 5 hearing including Nick Smith, my Deputy Chief of 6 7 Staff and Legislative Director Jen Wilcox and Malaika Is that right? Ok. Council Senior Guillermo 8 Jabali. 9 Patino, Jose Conde, Policy Analyst (inaudible) Sarah Gastelum the Committee Finance Analyst. 10

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11 As a reminder for those who would like to 12 testify today, please be sure to fill out a card with 13 the sergeant at arms, with that said we have few people with us. Assistant Commissioner Laura 14 15 Cavanaugh (sic), Thomas McCavinar (sic) and Richard Roach, did I say that right? Sorry, all from the FDNY 16 17 and I know that a Donald Geoffrey (sic) from DOB is 18 here in case we have any questions so I want to say 19 thank you very much. Can you please raise your right 20 hands? Do you affirm to tell the truth, the whole 21 truth and nothing but the truth in your testimony 2.2 before this Committee and to respond honestly to 23 Council Members questions? PANEL: Yes in Unisom. 24

1COMMITTEE ON HOUSING AND BUILDINGS72CHAIR WILLIAMS: You can begin with your3testimony in order of your preference. Thank you.4THOMAS MCCAVINAR: Good morning Council5Member Jumaane Williams, Council Member Crowley and6all the Council Members present. I'd like to start7first by apologizing on behalf of Chief Batifore8(sic) couldn't make it today. He's actually in9Africa doing an educational visit and I'm going to be10the Intern speaker on his behalf until he returns.11Thank you for opportunity to speak today about Int.12No. 56-A regarding photoelectric detector technology.13I am joined the morning by Assistant Commissioner14Laura Cavanaugh and Fire Prevention Inspector Richard15Roach. We appreciate the Council's concerns16regarding fire safety and your efforts to increase17available on the market.18CHAIR WILLIAMS: I'm sorry excuse me one19second. We're trying to find your testimony, have20Jbackground talking]21Lbackground talking]22CHAIR WILLIAMS: Ok thank you, I'm sorry23You can go ahead.		
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25	24	you can go ahead.
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2 THOMAS MCCAVINAR: Ok. Numerous studies, 3 years of research and real life data shows that many 4 fatal fires occur at night when occupants are asleep. Nighttime fires are particularly dangerous because 5 occupants are provided less time to become aware of 6 7 and escape a fire. Some evidence shows that 8 nighttime fires maybe more likely to begin as slow 9 smoldering fires. Affordable electric smoke detectors are the proven technology for these slow 10 11 smoldering fires. The other type of certified 12 detector technology in ionization technology and that 13 technology is better at detecting fast flaming fires. Because both detectors provide different advantages 14 15 because it is, because both detectors provide different advantages and because it is impossible to 16 17 determine what type of fire will occur in a residence. 18 19 National organizations that test and

20 certify detector standards such as the NFPA, ICC and 21 UL, support the use of both types of detectors. Of 22 the two technologies the majority of homes currently 23 have ionization detector rather than photoelectric. 24 For this reason the FDNY is currently providing 25 photoelectric detectors as part of it's Get Alarmed

New York City Education Program. Announced last week with the Major and the City Council. It is our hope that by providing photoelectric detectors as part of this program, we will increase the use of this technology.

7 Will the FDNY shares the City Councils
8 support for photoelectric technology the FDNY
9 believes there are a few issue to be discuss prior to
10 enacting such legislation.

As you are aware the FDNY does not have a research and development arm to do independent testing of detectors and the organization that do such test currently support both photoelectric and ionization smoke detector technologies. And we do look at these technologies these experts before we make changes to the City's fire and building code.

18 This legislation would limit the use of 19 ionization detectors which they have certified given 20 that many New York City dwellings only contain one detector. We'd want to consult further with these 21 2.2 organizations before limiting the use of an approved 23 technology. Additionally, the department worries that enacting such legislation might lead some people 24 to remove an existing ionization detector if they 25

1	COMMITTEE ON HOUSING AND BUILDINGS 10
2	believe such a detector is not effective or may incur
3	a fine or penalty if used. Sadly 2/3 of fatal fires
4	in New York City a working detector of any type was
5	not present. Therefore, the overwhelming focus of
6	the FDNY fire prevention efforts is educating New
7	Yorkers on the importance of having a certified
8	working detector in their home. We would want to
9	ensure that the implementation of this legislation do
10	not lead to the removal of any working detectors.
11	And finally, smoke detector technology
12	continues to revolve and new technologies can emerge
13	while the old ones are still being implemented. For
14	example, progress is being made around detectors that
15	contain both photoelectric and ionization
16	technologies as well as around the prevention of
17	nuisance alarms. The FDNY would like to find a way
18	to increase the use of photoelectric technology
19	without closing the door to other technologies that
20	may emerge. Aside from the concerns mentioned above
21	the FDNY supports the City Council efforts to bring
22	photoelectric devices into people's homes. We look
23	forward to working with them and organization such as
24	the NFPA, the ICC and the UL to address the concerns
25	mentioned above and find the best way to ensure New

1	COMMITTEE ON HOUSING AND BUILDINGS 11
2	Yorkers are safe and that fire deaths continue to
3	decline. We thank this committee and the entire City
4	Council for their ongoing support for our ongoing
5	fire safety education fire prevention efforts. My
6	colleagues and I will be happy to take your questions
7	at this time.
8	CHAIR WILLIAMS: Thank you very much for
9	your testimony, appreciate it but it's a little foggy
10	so I'm going to try get through some of the fog.
11	First how many fire deaths occur every year?
12	THOMAS MCCAVINAR:: Well it varies ok and
13	the trend is, I think the good news is the trend is
14	going down. I think in 2014 we had let me just get
15	you the exact number we had 71 fatalities in 2014
16	and of those 71 only 18 had working smoke detectors.
17	CHAIR WILLIAMS: Of the 71 only 18.
18	THOMAS MCCAVINAR: Approximately 2/3 in
19	generally speaking and nationally only 2/3 of the
20	homes that have fatal fires do not have working smoke
21	detectors.
22	CHAIR WILLIAMS: Thank you, first
23	congrats I'm glad that the deaths are going down and
24	hope to continue with it going down but of the smoke
25	
	I

1	COMMITTEE ON HOUSING AND BUILDINGS 12
2	detectors present do you keep track of what kind of
3	smoke detectors they were?
4	THOMAS MCCAVINAR: What what we do is we
5	do track the model and the make we do not track
6	whether or not it was a photoelectric or an
7	ionization detector. We were talking about that and.
8	CHAIR WILLIAMS: Sorry Sorry you get the
9	model and the make wouldn't that tell you whether it
10	is?
11	UNKNOWN: Well that's see to exactpilate
12	that information from that is what we're talking
13	about trying to do, so we… we when we can get the
14	model and the make number because many times these
15	smoke detectors are you melted beyond recognition but
16	when we can we try and get the model and the make
17	number and that's a part of the information that we
18	record but it doesn't tell you in our program whether
19	or not it's a photoelectric or ionization.
20	CHAIR WILLIAMS: But you're trying to set
21	it so that it would tell you in the future you mean?
22	THOMAS MCCAVINAR: That's something that
23	we're discussing currently.
24	CHAIR WILLIAMS: That would probably help
25	if we're trying to figure out which ones work best.

COMMITTEE ON HOUSING AND BUILDINGS 1 13 So you don't know how many people have photoelectric 2 3 versus ionization. 4 THOMAS MCCAVINAR: No and since, excuse me and since ionization is probably the longest 5 running technology that was used, there are more 6 7 ionization detectors that are out there then 8 photoelectric. 9 CHAIR WILLIAMS: The 100,000 smoke detectors were giving away, those are ionization? 10 11 THOMAS MCCAVINAR: The ones that were giving away now are combination detectors. Their 12 photoelectric and carbon monoxide detectors. There 13 not ionization. 14 15 CHAIR WILLIAMS: Your saying that they 16 are combination of photoelectric and ionization. 17 THOMAS MCCAVINAR: No. Combination 18 photoelectric and carbon monoxide detectors. 19 CHAIR WILLIAMS: So there photoelectric smoke detectors in the 100,000 giveaway. 20 THOMAS MCCAVINAR: We we felt that most 21

of most of the residences have ionization detectors now and being that each technology has it's strength well then let's... let's give out photoelectric detectors with a carbon monoxide component with it,

1	COMMITTEE ON HOUSING AND BUILDINGS 14
2	so when if you have ionization detector, a
3	photoelectric detector and carbon monoxide detector
4	we are covering the three major concerns.
5	CHAIR WILLIAMS: Are you is there a cost
6	difference?
7	THOMAS MCCAVINAR: I'm sorry.
8	CHAIR WILLIAMS: Is there a cost
9	difference in the photoelectric and the ionization?
10	THOMAS MCCAVINAR: A what difference?
11	CHAIR WILLIAMS: Cost.
12	THOMAS MCCAVINAR: Cost well I just took
13	a quick look today and I and I did have I took a look
14	like in a home depot and it was the combination alarm
15	for these photoelectric and the carbon monoxide was
16	about \$15. I think you can probably get an
17	ionization detector for about \$9.99. So they are
18	very, they are varying, they are varying cost.
19	CHAIR WILLIAMS: You just compared a
20	combo device.
21	THOMAS MCCAVINAR: Yes
22	CHAIR WILLIAMS: With a non-combo device.
23	THOMAS MCCAVINAR: Right.
24	
25	

2 CHAIR WILLIAMS: I'm talking about 3 straight photoelectric smoke detector and a straight 4 ionization smoke detector.

5 THOMAS MCCAVINAR: I think the cost 6 difference would be nominal, I don't think there's... 7 there's a great cost difference between the two.

8 CHAIR WILLIAMS: Now help me understand 9 the difference between the fires you're speaking 10 about because you said that they have different 11 strengths? But and I'm trying to understand what a 12 fast moving fire is and a slow moving fire.

THOMAS MCCAVINAR: Ok so what we're 13 14 talking about is a smoldering fire is just what it 15 sound like it's a, it's a slow starting mostly smoke 16 generating type of fire where a fast burning fire 17 might be something like a you're going to cook on 18 your stove and you got oil and you know you ... you 19 forget that you've left the flame on and now that 20 generates a flash fire as the oil reaches it's flash 21 point, that would be what you consider a flash a fast burning fire. 2.2

23 CHAIR WILLIAMS: So those fires would 24 have no time to smolder before it starts?

	1	COMMITTEE	ON	HOUSING	AND	BUILDING
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2 THOMAS MCCAVINAR: Well generally 3 speaking and speaking to the technically side of it, there are people that are much better experts on the 4 5 technology of it but my understanding of it all is that the ionization detector picks up the flash fast 6 7 burning fires more quickly than the photoelectric does. The photoelectric is designed to detect more 8 9 of the particulate from the smoke where the ionization one does not. 10

11 CHAIR WILLIAMS: So I... I get that you 12 would not be technology expert but I'm, but I'm trying get the expertise of the fire. I don't know 13 14 the expertise of how fires starts so I'm trying to 15 figure out in my head unless it's some combustion all 16 of a sudden. There has to be a time when the fire is 17 beginning so why would it not count at some point 18 that it's actually moved slower than fast? 19 THOMAS MCCAVINAR: I'm. I'm not sure I 20 understand the question. 21 CHAIR WILLIAMS: Wouldn't the fire at some point had to have been slow and then became 2.2 23 fast? 24 THOMAS MCCAVINAR: As I said depending on how the fire starts. So there is numerous ways that 25

1	COMMITTEE ON HOUSING AND BUILDINGS 17
2	fire start and so let take for instance what I see
3	is… is one of the trends lately and that would be
4	fire caused by electrical overloads. So you get one
5	of these strip panels right and everybody puts all
6	kinds of plugs in it and now the thing is kind of
7	unsightly so where does it go, it ends up underneath
8	the couch or underneath the bed and if there's a
9	malfunction of that what it will do is it'll ignite
10	whatever combustible around it and that's where you
11	get at least the beginning of a smoldering fire of
12	the cushions or the upholstery or the furnishings.
13	The
14	CHAIR WILLIAMS: (inaudible) that would
15	be a slow burning fire.
16	THOMAS MCCAVINAR: That would be, that
17	would be you know I hesitate to use the word slow
18	burning because studies show that the National
19	Institute of Standards and Technology did a test side
20	by side test and what they did was they compared two
21	different rooms of furniture and they compared a room
22	of furniture that was say from the 40's and the 50's
23	versus the contemporary furniture we have in our
24	homes now and they simulated a very small fire in a
25	couch and now they film and they want to see how long

1	COMMITTEE ON HOUSING AND BUILDINGS 18
2	does it take before the room is fully engulfed in
3	flame. Now the… the legacy furniture is you will
4	from the 40's, 50's, 60's that took about 30 minutes
5	before the room reach what's called flash over stage.
6	The furniture we have in our homes now, it took 3
7	minutes so, 3 minutes in my opinion does not
8	constitute a slow burning fire and if you take a look
9	at simply look at you can probably just look at
10	YouTube frankly and just type in new versus old room
11	fire and you'll only have to watch for 4 minutes and
12	you will see what we're talking about. There's
13	there's no slow burning fires anymore.
14	CHAIR WILLIAMS: I I I get it, I'm
15	trying to determine (inaudible) because I'm confused.
16	It sounds like the photoelectric one are better and
17	then you're saying there better for some type of
18	fires, I'm still not clear the differentials of those
19	types of fires. It's seems to me that whatever fire
20	it is whether it took 3 minutes to burn, 4 minutes to
21	burn, 2 minutes to burn at some point they began
22	unless it was spontaneous combustion they did have
23	some point of smoldering, so I'm trying to understand
24	if they are fires that had no points of smoldering at
25	all, they just spontaneously combusted?

1	COMMITTEE ON HOUSING AND BUILDINGS 19
2	THOMAS MCCAVINAR: This this is a from
3	experience grease fires are not going to be
4	smoldering fires they're going to be flash fires.
5	CHAIR WILLIAMS: Ok.
6	THOMAS MCCAVINAR: For the most part.
7	CHAIR WILLIAMS: And help me understand a
8	flash fire.
9	THOMAS MCCAVINAR: Oil… oil so you have
10	oil in a pan right, so you leave, you leave the flame
11	on underneath that oil, you heat up the oil, the oil
12	heats, it heats, it heats and eventually it ignites
13	and you don't see a lot of smoke that's generated.
14	It's not that type of smoldering fire that the
15	photoelectric detectors pick up, which would be the
16	beginning of a small fire in a couch or in a bed or
17	something like that. There's a you'd have to sort of
18	see to understand it but one of them give off a lot
19	more smoke initially then the other one does.
20	CHAIR WILLIAMS: So in in in your
21	expertise of fire not necessarily technology the
22	grease fire would not be caught on a photoelectric
23	smoke detector as fast as it would be caught by an
24	ionization smoke detector?
25	

1	COMMITTEE ON HOUSING AND BUILDINGS 20
2	THOMAS MCCAVINAR: That's the, that's the
3	difference between the two why we think that both
4	technologies have something to offer relative to fire
5	safety.
6	CHAIR WILLIAMS: Of the $2/3$ of the $1/3$ of
7	deaths that occurred with smoke detectors, were they
8	fast moving fires or slow moving fires?
9	THOMAS MCCAVINAR: Of the 1/3 of the the
10	CHAIR WILLIAMS: The deaths with smoke
11	detectors.
12	THOMAS MCCAVINAR: Right, so that's
13	that's a great questions and there, there are many
14	variables to… to answer that questions. Why the
15	smoke detectors didn't help and I can only just tell
16	you from a couple of experience fires I've had. They
17	were related to things like elderly citizens who had
18	very loose clothing on looking to make tea in the
19	morning or somewhere around the stove and their
20	clothing caught fire where the smoke detector would
21	not have prevented what occurred there because it
22	just happened to quickly.
23	CHAIR WILLIAMS: Do you know if was by
24	your definition slow moving fires or fast moving
25	fires?

2 THOMAS MCCAVINAR: I would say that was a 3 very fast moving fire based on the material of the 4 clothing that the person was wearing.

5 CHAIR WILLIAMS: So you think they were 6 the spontaneous combustion type not the smoldering 7 type.

8 THOMAS MCCAVINAR: I don't know if I'd 9 use spontaneous combustion I would just say that the... 10 the type of material that's in the night wear was 11 easily ignited and burned very quickly and so quickly 12 that the person wasn't even able to get out of their 13 apartment.

14 CHAIR WILLIAMS: So I get it, I'm trying 15 to, I'm trying to pinpoint this ... this thing here and 16 I don't know and I don't know if were saying we have 17 enough information to actually pinpoint it because 18 your saying you don't know if they had smoldered or 19 how long they smoldered or if they will spontaneous 20 combustion type fires. At minimum it's sounds like 21 your saying both of these are very important so than 2.2 shouldn't we saying are both of them are needed in 23 the units?

24 THOMAS MCCAVINAR: I think we're saying 25 that technologies are revolving. Photoelectric

1 COMMITTEE ON HOUSING AND BUILDINGS 22 2 technology is a good technology for smoke detectors. 3 Ionization technology is also good and we like both 4 of them. I like anything that give people a warning to get out during a fire, that's... that's my 5 statement. 6 7 CHAIR WILLIAMS: But by your testimony you're saying they both have their point so at 8 minimum wouldn't both of them be needed if it's the 9 technology we have available today? 10 11 THOMAS MCCAVINAR: You know what I would, I'd be happy with that if we had both, if we had both 12 types of detectors in the apartment; I'd have no 13 14 argument with that. 15 CHAIR WILLIAMS: And my last question and 16 then I'm going to go to my colleagues who bill it is, Council Member Crowley. We've been joined by Council 17 18 Member Cornegy will he sneaks in at 7 feet and 19 Council Member Reynoso. As it, which this I want to 20 go back to which do you think is more dangerous because if it's a flash fire if you're cooking 21 wouldn't you know that the fire has started as 2.2 23 opposed to if you fell asleep with a cigarette in your hand? 24

2 THOMAS MCCAVINAR: Not well, there's so 3 many variables to that. If you were standing right 4 in front of it, the likelihood is it wouldn't happen. What ends up happening is these are unattended so 5 something as simple as you turn on the flame under 6 7 the oreo and the phone rings and you take your phone 8 and go into the next room and you get involved in 9 conversation and you forgot that you left, you left the pan on I mean so if a flash fire occurs not when 10 11 we're standing there watching it but when we leave it 12 unattended.

13 CHAIR WILLIAMS: This is my last, this is my last, last question. Do you, do you have any data 14 15 on how many people died from those flash fire types? 16 THOMAS MCCAVINAR: I don't, I'm we ... we 17 can, we can look to see what the cause of the fire 18 was and maybe try and extract ways of information 19 from that but right now I don't have the information 20 at hand.

21 CHAIR WILLIAMS: You don't have it today 22 or does the fire department don't... don't have it? 23 THOMAS MCCAVINAR: Well the Bureau of 24 Fire and Investigation would tell us what the cause 25 of the fire was they I don't know that they going to

1	COMMITTEE ON HOUSING AND BUILDINGS 24
2	be able to tell us whether or not it flashed or it
3	was a slow smoldering fire. What we would try and do
4	it extrapolate that from what was the cause of the
5	fire and then we can make an educated guess as to
6	whether or not it was slow.
7	CHAIR WILLIAMS: whose job is that, it's
8	the fire department or who?
9	THOMAS MCCAVINAR: The Bureau of Fire
10	Investigation they they investigate the cause of
11	fires.
12	CHAIR WILLIAMS: Is that a State,
13	Federal, the Bureau?
14	THOMAS MCCAVINAR: New York City.
15	CHAIR WILLIAMS: New York City.
16	THOMAS MCCAVINAR: Bureau of Fire and
17	Investigation.
18	CHAIR WILLIAMS: How does the work on the
19	chart. You have the fire department and where is the
20	bureau?
21	THOMAS MCCAVINAR: So yeah, you have the
22	fire department with the Commissioner and then
23	there's the Bureau of Fire and Investigation.
24	CHAIR WILLIAMS: On the side?
25	
	ll de la constant de

1 COMMITTEE ON HOUSING AND BUILDINGS 25 2 THOMAS MCCAVINAR: Bureau of Fire Prevention, there a Bureau of Fire Operations. 3 CHAIR WILLIAMS: All underneath the FDNY? 4 5 THOMAS MCCAVINAR: Yes sir. CHAIR WILLIAMS: Oh so it's underneath 6 the FDNY? 7 8 THOMAS MCCAVINAR: Yes. 9 CHAIR WILLIAMS: All right, yeah I'd like to have that information I think it would be helpful. 10 11 THOMAS MCCAVINAR: Ok. 12 CHAIR WILLIAMS: But I'm going to call on 13 Council Member Crowley now. 14 COUNCIL MEMBER CROWLEY: Thank you Chair 15 Williams and good morning Chief and various 16 representatives from the Fire Department. The 17 Chairman asked some very good questions in regards to 18 this legislation and I'm just going to dig a little 19 Is there a representative from your Fire deeper. 20 Prevention Bureau that you mentioned that investigates the fires? 21 THOMAS MCCAVINAR: I'm from the Bureau of 2.2 23 Fire Prevention, the Bureau of Fire and Investigation would be the Marshalls we don't have any of our 24 Marshalls with us here right now. 25

1	COMMITTEE ON HOUSING AND BUILDINGS 26
2	COUNCIL MEMBER CROWLEY: How closely do
3	you work with your Marshalls?
4	THOMAS MCCAVINAR: Fire Fire Prevention
5	generally speaking now all 3 bureaus work together
6	when we see the you know where our our lines sort of
7	cross. So…
8	COUNCIL MEMBER CROWLEY: Sorry, so the 3
9	bureaus are Fire Prevention.
10	THOMAS MCCAVINAR: Fire Prevention.
11	COUNCIL MEMBER CROWLEY: Investigation.
12	THOMAS MCCAVINAR: Operations.
13	COUNCIL MEMBER CROWLEY: Operations.
14	THOMAS MCCAVINAR: So operations are the
15	guys that are out on the on the on the rigs and the
16	fire houses, fire prevention are inspectors
17	conducting fire prevention inspections and the bureau
18	of fire investigation if you would, would be the… the
19	police department within the fire department. It's
20	our.
21	COUNCIL MEMBER CROWLEY: Right.
22	THOMAS MCCAVINAR: Our armed
23	investigators.
24	COUNCIL MEMBER CROWLEY: In the police
25	department, they work closely right so in order to

1 COMMITTEE ON HOUSING AND BUILDINGS 27 prevent crime you work with detectives to see how 2 crime come from right? 3 4 THOMAS MCCAVINAR: Yes, we see trends, we try and bring it to their attention and they do the 5 same with us. 6 7 COUNCIL MEMBER CROWLEY: But you didn't seem prepared today with your numbers. You mentioned 8 9 there were over 70 what about 75 fire fatalities last year. Was it 18 of those deaths had smoking 10 11 detectors, smoke detectors working or was it 18%? 12 THOMAS MCCAVINAR: 18 had working smoke detectors of the 71, 18 had detectors that worked. 13 14 COUNCIL MEMBER CROWLEY: Right and of the 15 18 fatalities you do not know whether it was a smoldering fire or a fast moving fire? 16 THOMAS MCCAVINAR: Off the top of my head 17 I don't have that information but I we. 18 19 COUNCIL MEMBER CROWLEY: But that's critical information we should look at. 20 21 THOMAS MCCAVINAR: Absolutely. COUNCIL MEMBER CROWLEY: What about the 2.2 23 vast majority of fire related fatalities, are they from fast moving fires or from smoldering fires? 24 25

1 COMMITTEE ON HOUSING AND BUILDINGS 28 2 THOMAS MCCAVINAR: We would have to look 3 at it. 4 COUNCIL MEMBER CROWLEY: That is something we should know. 5 THOMAS MCCAVINAR: Ok. 6 7 COUNCIL MEMBER CROWLEY: The vast 8 majority I hear about when there is a fire fatality 9 or smoldering fires. THOMAS MCCAVINAR: And just to you know 10 11 reiterate, I don't know of a slow moving fire 12 anymore, there all fast moving. 13 COUNCIL MEMBER CROWLEY: But you ... you 14 don't know because before when the Chairman asked you 15 a question about the 18 that died with smoking, smoke alarms that work you said it was likely an older 16 woman at the stove. 17 THOMAS MCCAVINAR: No... no ... no I... I didn't 18 19 say that, I didn't say it was likely that, that 20 happened I said that is one of the occasions where a 21 smoke detector would not have prevented the fatality. 2.2 COUNCIL MEMBER CROWLEY: A photoelectric 23 smoke detector. THOMAS MCCAVINAR: Any smoke detector. 24 25

1	COMMITTEE ON HOUSING AND BUILDINGS 29
2	COUNCIL MEMBER CROWLEY: But we don't
3	know? We don't know if that was one of the fatalities
4	that happened last year?
5	THOMAS MCCAVINAR: No, I couldn't tell
6	you if the exact one is one.
7	COUNCIL MEMBER CROWLEY: But we do know
8	that in Brooklyn when seven children died in a fire
9	fatality it was a smoldering fire?
10	THOMAS MCCAVINAR: We do know that there
11	were no working smoke detectors in that house.
12	COUNCIL MEMBER CROWLEY: Every time I see
13	on the new or read in the newspaper your fire
14	fighters, your operation side are taking bodies out
15	of buildings that would not affected by the fire but
16	were affected by smoke inhalation and you don't know
17	here that actual number each year of how many died
18	from smoke detector, from smoke inhalation versus
19	raging fire?
20	THOMAS MCCAVINAR: I would say that just
21	about 100% probably died from smoke inhalation.
22	COUNCIL MEMBER CROWLEY: 100%?
23	THOMAS MCCAVINAR: That well that's
24	that's the major cause of death is carbon monoxide
25	poisoning.

1 COMMITTEE ON HOUSING AND BUILDINGS 30 2 COUNCIL MEMBER CROWLEY: Not to the woman 3 that catches fire at a stove. 4 THOMAS MCCAVINAR: Right and ... and COUNCIL MEMBER CROWLEY: But almost 100%. 5 THOMAS MCCAVINAR: Yes, absolutely. 6 7 COUNCIL MEMBER CROWLEY: And then that should end the hearing right here. 8 9 THOMAS MCCAVINAR: Ok. 10 COUNCIL MEMBER CROWLEY: You're giving 11 away free smoke detectors today and your giving away 12 photoelectric. 13 THOMAS MCCAVINAR: Right. COUNCIL MEMBER CROWLEY: Tend to be more 14 15 expensive but I believe each and every one you hear 16 on the panel has a photoelectric in your house if you 17 know about fire safety. 18 THOMAS MCCAVINAR: Ok. 19 COUNCIL MEMBER CROWLEY: Do you? 20 THOMAS MCCAVINAR: I do. COUNCIL MEMBER CROWLEY: If you had one, 21 which one would it be? 2.2 23 THOMAS MCCAVINAR: I have both technologies. 24 25

1 COMMITTEE ON HOUSING AND BUILDINGS 31 2 COUNCIL MEMBER CROWLEY: You only have, I 3 understand that but if you could only protect 4 hypothetically. THOMAS MCCAVINAR: Hypothetically I want 5 one that works and both of them work, both 6 7 technologies I want to protect my family with both, that's what I have. 8 9 COUNCIL MEMBER CROWLEY: With the odd of your family your home going on fire and your family 10 11 dying from that fire it's... it's smoke inhalation not a raging fire. The odds are you said almost 100%. 12 THOMAS MCCAVINAR: Correct. 13 COUNCIL MEMBER CROWLEY: Ok. 14 So to me it 15 just makes since to have a photoelectric because it's 16 you know the a underwriters laboratory known as UL say that a photoelectric will pick it up smoke 48 17 minutes faster than an ionization smoke alarm and 18 19 that one we have the new sensor alarms that happen 20 because of smoke in a kitchen and the battery goes 21 off and there's really no fire people take the battery out of the smoke alarm because of nuisance 2.2 23 alarms and photoelectric are less likely to have these types of nuisance alarms. So if a family has a 24 25 working smoke detector or no working smoke detector

1	COMMITTEE ON HOUSING AND BUILDINGS 32
2	it's more likely that they have that ionization one
3	without the battery because it went off because of a
4	nuisance alarm and had we had this technology with
5	the photoelectric it would never have had the
5	puisance alarm to begin with I know that there are
0	nursance ararm to begin with. I know that there are
./	some some people who get confused and say just tell
8	us what kind and of course it's better to have both
9	but if you're giving away the photoelectric on,
10	you're paying more money for that one and your saying
11	(inaudible) that this is better. New Yorkers get
12	confused when the go to a hardware store and they
13	don't know which type of smoke alarm to get. It's
14	better to have both but if you're only going to have
15	one, it's better to have the photoelectric. I have
16	no other questions.
17	CHAIR WILLIAMS: Thank you a I just
18	wanted to get clarity so most people who die from
19	fires from smoke inhalation is that correct? What
20	percentage is it?
21	THOMAS MCCAVINAR: That's correct.
22	CHAIR WILLIAMS: What percentage is it?
23	THOMAS MCCAVINAR: I don't have
24	percentage but an I guess we can probably find
25	

1 COMMITTEE ON HOUSING AND BUILDINGS 33 2 numbers on the cause of death through the medical 3 examiner's office. 4 CHAIR WILLIAMS: Would you say it's more 5 51% or 95%? THOMAS MCCAVINAR: I would say most time 6 7 smoke inhalation is the, is the major cause of death. 8 Carbon monoxide poisoning. 9 CHAIR WILLIAMS: Ok smoke inhalation or carbon monoxide poison? 10 THOMAS MCCAVINAR: Well it's... it's carbon 11 monoxide is... is one of the ... 12 CHAIR WILLIAMS: In the smoke. 13 14 THOMAS MCCAVINAR: Yes, that's the 15 primary. 16 CHAIR WILLIAMS: Ok. THOMAS MCCAVINAR: Poison that in there. 17 18 CHAIR WILLIAMS: It seems to me one I'm 19 very disappointed that you don't have the information 20 were looking for because I think enough notice was given about this hearing, this bill and another forum 21 was heard last ... last session. Council Member 2.2 23 Rosenthal you know you don't want to, you don't? [off mic] 24 25

2 CHAIR WILLIAMS: Ok thank you all right It was ... was there was some hesitation during 3 thank. 4 that hearing. It seems to me that there is an acknowledgement of how good it is but some hesitation 5 to say that it should be this one, at least you said 6 7 in your testimony that maybe it should be both but there's nothing backing up why you're saying it is 8 9 and if you had the data to back it up my belief is that you would have it here today so it leads me to 10 11 believe that there may not be a real reason or you 12 don't have the data to back it up, so I'm ... I'm not 13 sure what to say to that but I mean if you had the 14 data it should have been here today, so I'm 15 disappointed that's not it's not it's all germaine to the topic that we said we were going to talk about so 16 17 having that information particularly if there's 18 hesitation on your side would have helped us out a So I'm sorry you want to say something. 19 lot. 20 RICHARD ROACH: It's ok. Let me just 21 interject, Chief Batisfore has taken an extreme personal interest in this project and unfortunately 2.2 the personal data and information that he's collected 23 incidentally he came through the fire marshal's 24 office of the fire department before he reached his, 25

1	COMMITTEE ON HOUSING AND BUILDINGS 35
2	his current rank as Chief of Fire Prevention.
3	Unfortunately, much of that data is simply not
4	available to us today because Chief Batisfore is out
5	of the Country in Africa on a teaching mission. We
6	did not have access to his information so I believe
7	we may have tried to get this postponed as a result
8	of the fact that the Chief couldn't be here but rest
9	assure he has additional information that would have
10	been extremely helpful to have here today and I think
11	you would have been much happier with that. It's
12	just that we could not access it. What he does in
13	his, in his office and and spare time we just was to
14	privy to.
1 –	

CHAIR WILLIAMS: Ok appreciate that, 15 there might have been some data sets that could have 16 17 been given to you I think that might have been helpful it's terrible if only one person in the 18 19 entire department has access to the data. Maybe you couldn't have explained it as well but I'm sure it's 20 some data sets that could have been handed off to 21 2.2 someone to provide us today and that piece of 23 information about most people dying from inhalation seems to me a very important piece to saying which 24 25 one these would actual be more effective. But I

COMMITTEE ON HOUSING AND BUILDINGS 1 36 2 think Council Member Crowley has one more question 3 and then we have Council Member Reynoso. 4 COUNCIL MEMBER CROWLEY: Every time there 5 is a fire, the fire marshals come and investigate correct? 6 7 THOMAS MCCAVINAR: Every time there's a fatal fire, they do yes. 8 9 COUNCIL MEMBER CROWLEY: But not every time there's a fire? 10 11 THOMAS MCCAVINAR: Well they just don't 12 have the resources to investigate every fire that we 13 have in the City. 14 COUNCIL MEMBER CROWLEY: Ok at what point 15 do they start the investigation if there's? THOMAS MCCAVINAR: Usually if the fire is 16 17 deemed suspicious that's when they would come out but 18 if ... if there's you know careless cooking on the 19 stovetop the fire marshals would not need to 20 investigate that because the units on the scene were able to determine the cause. 21 2.2 COUNCIL MEMBER CROWLEY: Ok no... no further 23 questions. CHAIR WILLIAMS: Thank you, Council 24 Member Reynoso. 25
2 COUNCIL MEMBER REYNOSO: Thank you guys 3 for being her by the way and thank you for all the 4 work that you do and to the fire department as well. Just a wanted to ask a couple of question and you say 5 smoke inhalation, can you just describe that scenario 6 7 and why it's most folks die from that in a fire than 8 the actual fire because I just want put in 9 perspective because what I'm seeing is there's a fire you know I'm running away from the fire probably 10 11 catching more smoke than being burned and possibly 12 dying because of all the smoke I'm inhaling not 13 necessarily because I quess it's a, it's a 14 circumstantial situation where you're not going to 15 run into fire you're running away from it. You'd 16 rather run into smoke so in an effort to prevent you 17 know an agonizing death you're running towards smoke 18 I'm guessing. Does that make any sense? I just want 19 to put it into perspective on why it's happening a lot more than like death through fire. 20 21 THOMAS MCCAVINAR: I'm. I'm sorry Council Member Reynoso I'm sure what's the question exactly? 2.2 23 COUNCIL MEMBER REYNOSO: So I quess what

24 the difference so why is it that people die from 25 smoke as oppose to fire when there is a fire? And... 1 COMMITTEE ON HOUSING AND BUILDINGS 3 2 and do you haven't explained that you kind of just 3 said it but let's explain it so that to put into 4 perspective.

5 THOMAS MCCAVINAR: Ok to answer you I understand you question now. Most of the fire 6 fatalities happen during the night when people are 7 8 sleeping and the things is that carbon monoxide is 9 the poison that normally kills us because it mixes with the hemoglobin and it's you know there's a whole 10 11 metabolically things that happens where your blood 12 absorbs carbon monoxide faster and that ends up being what kills us is the carbon monoxide and it excludes 13 the oxygen from our, from our bodies and while I'm 14 15 not a doctor or anything I just know that all the 16 studies say that carbon monoxide is the primary 17 killer in smoke.

18 COUNCIL MEMBER REYNOSO: Ok thank you it's so than my idea of why people are dying to smoke 19 20 as oppose to fire is off so but I get it, it's the 21 carbon dioxide, I do want to say there's so there's a I have a concern about having to replace every single 2.2 23 smoke detector in the City of New York from a from what we currently have which you think is effective 24 into a photoelectric I guess system and what that 25

1	COMMITTEE ON HOUSING AND BUILDINGS 39
2	means and whether people would think theirs is
3	illegal, whether they think there is insufficient you
4	know I'm just really concerned about that entire
5	transition. I would actually prefer that maybe we
6	have this legislation speak to new buildings or new
7	residences that are coming up as oppose to the entire
8	City of New York. I don't necessarily no if that
9	what the legislation does but maybe you can clarify
10	because you probably looked through the legislation
11	clearer. Does this apply to every single residential
12	building in the City of New York or to maybe new
13	construction?
14	LAURA CAVANAUGH: Sure, we share that
15	concern I think we've mentioned it in the testimony
16	and we'd be open to a solution that resolved that
17	concern for sure.
18	COUNCIL MEMBER REYNOSO: Ok so I'm Chair
19	I just want to let you know that this doing the City
20	Wide it would be a huge concern to me, I've seen that
21	transitioning happening but also how many deaths
22	happen because of no fire smoke detector or no or
23	defective smoke detectors? What percentage of fires
24	happen in that time?
25	

2 THOMAS MCCAVINAR: I believe the... the 3 statistics indicate that 2/3 of the fire fatalities 4 which occur in homes that do not have working some 5 detectors.

6 COUNCIL MEMBER REYNOSO: So 66% of fires 7 happen because or happen in locations that either 8 have faulty or no smoke detectors?

9 THOMAS MCCAVINAR: 66% of the deaths 10 occur because of that.

11 COUNCIL MEMBER REYNOSO: Deaths so we 12 would be preventing 66% of those deaths just by 13 putting in what we the standard stuff that we have 14 now, we would have 2/3 less fires just that way. So 15 I see that our bigger problem here so if 90% of the 16 deaths are happening because of smoke inhalation but 17 66% of those deaths are happening because there is no 18 fire detector, I think the big, the fire detection I 19 think the bigger issue we have is making sure 20 everyone has a working fire detection system and not 21 necessarily that we change the model. Especially this sweeping the entire City of New York situation. 2.2 23 So I'm currently on the legislation. I would only agree to stay on it if we talk about possibly making 24 it so that new buildings get these types of fire 25

1	COMMITTEE ON HOUSING AND BUILDINGS 41
2	detection services and that we continue to make a
3	push to that every single building has it and that
4	your inspectors or whatever we need to do get to work
5	and make sure that every building has a functional or
6	an actual smoke detector. Thank you.
7	CHAIR WILLIAMS: Thank you very much
8	Council Member Reynoso. Just for clarity I
9	(inaudible) carbon monoxide is in the smoke and that
10	the smoke will catch in the photoelectric which would
11	make that one more effective and from what we're
12	hearing. I understand
13	COUNCIL MEMBER REYNOSO: Terry can I just
14	ask another question? I'm sorry so but I have a
15	carbon monoxide detector slash smoke detector is that
16	so can you explain why that's not I don't understand
17	your saying carbon monoxide is the problem and that's
18	what the photoelectric would look at so my carbon
19	monoxide detection machine.
20	CHAIR WILLIAMS: Hold on I'm saying the
21	photoelectric, I think combos are better I'm just
22	saying if you have a photoelectric as oppose to a… a
23	photoelectric smoke detector versus an ionization
24	smoke detector because the carbon monoxide is in the
25	

COMMITTEE ON HOUSING AND BUILDINGS 1 42 2 smoke the photoelectric will catch the regular smoke 3 quicker, carbon monoxide or not. 4 COUNCIL MEMBER REYNOSO: So I'm guessing I have a photoelectric. 5 CHAIR WILLIAMS: No you, you can have 6 7 probably ionization smoke detector and a carbon 8 monoxide together. But what I'm saying is if you 9 don't have a combo and you have one or the other. COUNCIL MEMBER REYNOSO: Right. 10 11 CHAIR WILLIAMS: The photoelectric will catch the other elements in the smoke so even though. 12 COUNCIL MEMBER REYNOSO: Ok. 13 14 CHAIR WILLIAMS: Sorry go ahead. 15 THOMAS MCCAVINAR: I just wanted to add 16 to answer your question about the carbon monoxide 17 component and that is that carbon monoxide is 18 odorless, colorless and tasteless right so, so that's 19 why we need that so if your, if your fuel burner in 20 the basement should malfunction you won't necessarily 21 get the particulate matter which sets off a photoelectric detector but a carbon monoxide detector 2.2 23 will be able to detect the invisible carbon monoxide which is which is the poison and you see every year 24 25 unfortunately where a person or a family is overcome

1	COMMITTEE ON HOUSING AND BUILDINGS 43
2	in the middle of the night by carbon monoxide because
3	it's impossible to detect with the human senses.
4	That's why we need to have the carbon monoxide
5	detectors and that why I think the law requires it.
6	COUNCIL MEMBER REYNOSO: So the carbon
7	monoxide detections happen better with a carbon
8	monoxide detector than it does with a photoelectric?
9	CHAIR WILLIAMS: I don't think the
10	photoelectric catches, a photoelectric any smoke
11	detector doesn't catch carbon monoxide so if you want
12	to if were comparing apples to apples were just
13	comparing ionizes smoke detector and photoelectric
14	smoke detector. Any but any combination with the
15	carbon monoxide would be better because with the
16	carbon monoxide we get it by itself.
17	COUNCIL MEMBER REYNOSO: But if if our
18	biggest concern is carbon monoxide deaths which are
19	90% of what's which are the majority of what's
20	happening then wouldn't a better solution be mandate
21	in carbon monoxide detectors as oppose to the
22	photoelectric? So I'm I'm, I guess I'm I'm just.
23	CHAIR WILLIAMS: That's That's mandated
24	already.
25	

2 COUNCIL MEMBER REYNOSO: All right, so 3 all right so I didn't necessarily think there's a 4 problem is what I'm trying to say.

5 THOMAS MCCAVINAR: If I can just ... just maybe this will clear this up. Carbon monoxide is 6 7 the most abundant gas in fires. It's within the smoke particulate. Carbon monoxide by itself without 8 9 particulate matter of a smoldering fire is poison and will kill you and it's invisible so we need to have 10 11 carbon monoxide and you need to have a smoke detector because that's what detects the particulate matter in 12 13 the smoke the unburned incomplete combustion creates 14 that particulate matter that our smoke detectors are 15 detecting.

16 COUNCIL MEMBER REYNOSO: All right thank,
 17 I'm sorry I just wanted to get a lot of clarity here.
 18 THOMAS MCCAVINAR: No problem.

19 COUNCIL MEMBER REYNOSO: And I feel like20 I'm... I'm getting to a better place.

21 CHAIR WILLIAMS: And I let it go because 22 I know I'm always shocked at how many people actually 23 watch these hearings, so I'm sure that some of the 24 people watching probably have similar questions. And 25 I understand you share the concerns of Council Member

1 COMMITTEE ON HOUSING AND BUILDINGS 45 2 Reynoso about sweeping this across the City as oppose 3 to new construction. My only issue is a normally I 4 would have similar concern I might still have a 5 little bit but ... but given the fact that I believe we know there's so many smoke detectors that are not 6 7 even operational properly because people don't change the batteries. I'm not sure if... if it doesn't make 8 9 since to try to get an operational one in there. Ιf you can just respond to that, if you know how many, 10 11 how many don't work because people don't replace the 12 batteries properly or something like that would be helpful. So I know I've had some in batteries so 13 14 long like the little acid came out. You probably 15 shouldn't admit that but you know you just didn't 16 change the batteries often enough and I know I'm not 17 the only one that does that. THOMAS MCCAVINAR: Well I don't have the 18 19 exact statistics for just the City of New York but I 20 can tell you that in the nation there are roughly 5 21 million homes that are unprotected in any way with 2.2 any type of ... of smoke alarm. And certainly the fire 23 department. This is just for clarity 24 CHAIR WILLIAMS: when you say 5 million homes that includes an 25

1 COMMITTEE ON HOUSING AND BUILDINGS 46 individual apartment and a one and two family home? 2 3 How do, how do you what are you counting as home? 4 THOMAS MCCAVINAR: That's a dwelling a 5 dwelling unit. CHAIR WILLIAMS: One dwelling unit ok. 6 7 THOMAS MCCAVINAR: One dwelling unit. There are roughly 5 million dwelling units in the 8 9 United States that have no type of protection whatsoever. 10 11 CHAIR WILLIAMS: Protection means 12 sprinkler systems, smoke alarms. 13 THOMAS MCCAVINAR: No I'm sorry have no type of a smoke alarm whether it be photoelectric or 14 15 ionization, there's roughly 5 million dwelling units within the country that have no smoke alarm of any 16 17 type. 18 CHAIR WILLIAMS: Any numbers particularly 19 in New York City and particularly those who have 20 unworking smoke detectors? 21 THOMAS MCCAVINAR: Well the problem we have in New York City is that we did not have the 2.2 23 jurisdiction as the New York City Fire Department to enter into a two family home in the City and even 24 begin to try to obtain some of that data. So that's 25

1	COMMITTEE ON HOUSING AND BUILDINGS 47
2	one of the things that we would like to work with
3	City Council with the Department of Buildings, with
4	the Housing Preservation and Development Department
5	to overcome so that we can actually get that data.
6	But as it stands right now if we come to your two
7	family home and Staten Island and knock on your front
8	door, they have every right to tell us that we cannot
9	come in to see whether they have a smoke detector.
10	So when we have no way of getting the data it's
11	extremely difficult to give the numbers for just the
12	city.
13	CHAIR WILLIAMS: Do you have data on
14	multiple unit dwellings?
15	THOMAS MCCAVINAR: I don't know that we
16	have the data either again there's an issue with that
17	as well. We can knock on your apartment door in a
18	multiple dwelling but if you turn us away.
19	CHAIR WILLIAMS: Yep.
20	THOMAS MCCAVINAR: We… we can't get in.
21	We have no way to to to get that data. That's a
22	problem that I've actually spoken with Richard Canter
23	(sic) about who is in the room with us today. That's
24	a problem that I've spoken with Deputy Chief Flemming
25	in the City of Boston and other officials throughout

1COMMITTEE ON HOUSING AND BUILDINGS482the nation. One of the components of any successful3program has to be that you have to be able to get the4data that's relevant to what you're trying to5accomplish.

6 CHAIR WILLIAMS: Yes we have, we have 7 that issue with obviously DOB and trying to get 8 illegal uses of apartments and illegal conversions 9 people don't have to let them in so, I'm familiar 10 with that. And the other Cities are they having the 11 same issues or they have they work, they have a 12 workaround?

13 THOMAS MCCAVINAR: Well every jurisdiction in the United States is ... is got a bit of 14 15 a different twist to it if you will. Some 16 jurisdictions can go into a two family home. The laws that have been in passed in those municipalities 17 18 allow them legal access to those locations. So 19 unfortunately in the City of New York we ... we aren't 20 quite to that point yet and this is one of the things Chief Batifore is been looking at is that ... that 21 2.2 enforcement component, the educational component 23 we've been talking to other jurisdictions and we've been working quite frankly, we've been working hand 24 and hand with the ... the Council Members office as well 25

COMMITTEE ON HOUSING AND BUILDINGS
 as some of the other intercity agencies in
 determining if there's a better way of doing
 business.

49

CHAIR WILLIAMS: Ok well definitely 5 appreciate that. I'd be interested to look back and 6 7 see how we did it with the carbon monoxide because we 8 did make that mandatory thing. If I remember 9 correctly not just a new but also in existing. So thank you for your testimony. Anybody who's watching 10 11 I think even though it sounds like the photoelectric is actually the better one, it's better to have 12 13 anyone than to have none. So we don't want people 14 not to purchase one just because they're not sure. 15 You should go ahead and purchase one as well as a 16 carbon monoxide if you don't have one because believe 17 your landlord should have provided you with one and 18 for the carbon monoxide at least I think they can 19 charge you, if I remember correctly. But please just 20 make sure that you get one of those and don't get 21 bogged down.

22 LAURA CAVANAUGH: Can I just note as part 23 of the program...

CHAIR WILLIAMS: Sure.

25

2 LAURA CAVANAUGH: We announced with you 3 last week, you can call 311 any resident can call 311 4 and we will get them a photoelectric combo alarm with a CL alarm and we will install for them. 5 CHAIR WILLIAMS: Nice. Thank you very 6 7 much for that, appreciate it. Hold on one second. 8 COUNCIL MEMBER CROWLEY: There's just a 9 point that I want to clarify for people who may be watching on TV to. While it better to have both you 10 11 cannot believe that your home is fully protected 12 without the photoelectric. So I don't want New 13 Yorkers to think that if they have the ionization 14 then their ok. Because we don't have proof of that 15 and that's really at the heart at were getting at 16 today. If you want to make sure your home is as safe 17 as it possible can be you should have both. But if 18 you're going to buy one, it's better to buy the 19 photoelectric one. And that's what we would like to 20 do eventually with this bill, just make sure that 21 everyone knows that it's not only the safest but it's 2.2 also the law, photoelectric. 23 CHAIR WILLIAMS: Gotcha, if ... if the fire

23 CHAIR WILLIAMS: Gotcha, if... if the fire 24 department handing them out I think that's is a nod 25 to what you're saying as well.

1 COMMITTEE ON HOUSING AND BUILDINGS 51 2 COUNCIL MEMBER CROWLEY: Yes. 3 CHAIR WILLIAMS: I just don't want 4 anybody to stand up at a hardware store and decide not to buy any because they want to ask further 5 questions about which is ... 6 7 COUNCIL MEMBER CROWLEY: It is also worse to think that your home is protected when it's really 8 9 not to. 10 CHAIR WILLIAMS: Yes but I disagree with 11 the message that sends so I agree that we need to 12 make it a lot more codified and it sounds like photoelectric is better but please get something to 13 14 protect your house. I think the question we were 15 trying to get if you know but it sounds like you may 16 not base on data. Of the deaths that occurred how 17 many had non-working smoke detectors because the 18 batteries were not changed? Do you know that? Or how 19 many, or how many batteries were not changed or how 20 many batteries were removed? 21 THOMAS MCCAVINAR: We don't have that, we don't have data here available with us today. 2.2 Ι 23 think that the that's an important question and one of the components of this new program that perhaps 24 25 Commissioner Cavanaugh would like to expand on is

1	COMMITTEE ON HOUSING AND BUILDINGS 52
2	that these detectors that we giving out have a sealed
3	10 year lifetime lithium ion battery. The New York
4	City Fire Department is looking at that along with
5	your your manufactures UL in that we are trying to
6	make sure that a quality device is on the market to
7	the, to the people and the detectors that are being
8	given out have this 10 year sealed lithium ion
9	battery so that changing batteries and or replacing
10	batteries is a component of the problem that
11	hopefully some point in time will go away. That the
12	industry is correcting itself along with the fire
13	department assistance in that but perhaps a the
14	Commissioner would like to expand upon that.
15	LAURA CAVANAUGH: I mean I think I agree
16	with that. I just want to note I don't think that
17	the department disagrees with you on the technology,
18	we simply want to talk more about the implantation,
19	so I don't think we're very far apart unfortunately
20	because the Chief if out of town and is unreachable
21	and I don't think know were having this hearing
22	today, we weren't able to talk about some of the
23	implantation issues but I don't think we're very far
24	apart so I think it just a matter of a conversation.
25	

4

2 CHAIR WILLIAMS: I'm sorry can you state3 your name for the record.

LAURA CAVANAUGH: Laura Cavanaugh.

Thank you very much. 5 CHAIR WILLIAMS: Obviously, I wish we had more data but everything 6 7 you're saying actually thinks supports as you are gathering Council Member Crowley bill and what she 8 9 saying for handing out 100,000 in which we've chosen photoelectric smoke detectors. I think because we 10 11 realize that that is the better technology and I'm 12 not, I know there seems to be some apprehension, 13 maybe it's just about the implantation I hope that's 14 what it is otherwise I really haven't been persuaded 15 by anything that was said why we wouldn't do 16 something like this so. 17 LAURA CAVANAUGH: Our concerns are about

18 the implantation, not the technology.

19 CHAIR WILLIAMS: OK. So then, Council 20 Member Crowley is right, if someone is listening, 21 they should buy photoelectric smoke detector and a 22 carbon monoxide. Ok thank you very much I appreciate 23 it thank you. I think we have one panel with one 24 person, Richard Cantor, New York Electronic Security 25 Association.

1	COMMITTEE ON HOUSING AND BUILDINGS 54
2	[pause]
3	CHAIR WILLIAMS: Mr. Cantor can you
4	please raise your right hand. Do you affirm to tell
5	the truth the whole truth and nothing but the truth
6	in your testimony before this committee and to
7	respond honesty to Council Member questions?
8	RICHARD CANTOR: (off mic)
9	CHAIR WILLIAMS: Is the mic one? Is it
10	lit?
11	RICHARD CANTOR: Now it's lit, is that
12	better?
13	CHAIR WILLIAMS: Yes, can u just respond
14	again do you affirm to tell the truth the whole truth
15	and nothing but the truth in your testimony before
16	this committee and to respond honesty to Council
17	Member questions?
18	RICHARD CANTOR: Yes I do to the best of
19	my ability.
20	CHAIR WILLIAMS: Thank you and we have
21	will put 3 minutes on the clock, 3 minutes on the
22	clock for you begin your testimony.
23	RICHARD CANTOR: I'm sorry how much?
24	CHAIR WILLIAMS: 3 minutes.
25	RICHARD CANTOR: That's it?

2 CHAIR WILLIAMS: But they'll be questions 3 and.

RICHARD CANTOR: Ok well let me just say 4 good morning and I'm delighted to be here so thank 5 you for inviting me. I am Richard Cantor and 6 7 hopefully my name is familiar to at least vaguely familiar to most of you because I have been writing 8 9 letters to and emailing and testifying before the City Council Members and the Mayors and the Fire 10 Commissioners and Fire Chiefs for almost 30 years. 11 Personally, I'm a fire safety expert having passed 12 the highest testing level, level 4 by the National 13 14 Institute for certification in engineering 15 technologies for fire alarms. I'm also a certified 16 training instructor for the Electronic Security 17 Association plus a New York State license security 18 and firearm instructor with over 37 years of 19 experience in the fire safety industry. I am the 20 owner of Ameriagorid (sic) Alarm and Security 21 Corporation a UL listed company, which has been installing residential and commercial fire alarms 2.2 23 systems since 1978 and I'm the President of the New York Electronic Security Association who's members 24 install fire alarms systems and if the invitation of 25

1	COMMITTEE ON HOUSING AND BUILDINGS 56
2	FDNY I have served on the industry advisory board.
3	As a disclaimer it is important to mention that
4	neither I nor any of the companies I owned has any
5	vested interest in the legislation. We do not
6	manufacture any fire alarm products, we never have
7	and we have no intention in doing so in the future.
8	My only purpose for being here today is to help saves
9	lives by providing information Council Member need to
10	assure the passage of Int. No. 56-A because it is a
11	wonderful piece of legislation that is long overdue
12	and overtime it will result in saving hundreds and
13	eventually thousands and then tens of thousands of
14	lives. Before beginning the body of my testimony I
15	want to acknowledge my deep respect for Council
16	Members because you have a far tougher job than most
17	people realize. You have to parse the testimony that
18	is all over the map. Often confusing, contradictory,
19	in accurate, incomplete and bias. I am an expert in
20	this field and sometimes what I read and hear has me
21	shaken my head in disbelief. On top of that you have
22	to look at this bill in terms of the cost impact. So
23	let me reassure you that this is a superb bill in
24	every respect. It is simple, clear and easy to
25	comply with. It will significantly improve fire

1	COMMITTEE ON HOUSING AND BUILDINGS 57
2	safety throughout the City for all residence. It
3	will require the installation of photoelectric
4	detectors without prohibiting the installation of
5	other types of detectors in addition and it will cost
6	practically nothing in direct cost while saving
7	incalculable amounts in union suffering and many
8	times it cost in reduced property losses. With that
9	since my time is limited, I would like to just start
10	a video for you and hopefully I can get this going.
11	No I'm not connected. Let me see what's happening.
12	CHAIR WILLIAMS: How long is the video?
13	[talking off mic]
14	[video playing]
15	RICHARD CANTOR: Thank you we can kill it
16	there and not go further. If I have more time I'll
17	continue my testimony, If I do not I'd be glad to
18	answer your questions.
19	CHAIR WILLIAMS: Thank you very much you
20	testimony and the video. Do you know so the
21	photoelectric detector was put in at about the 25
22	minute mark? Do you know how long it would've taken
23	if it was in the from the beginning of the smoking?
24	RICHARD CANTOR: Because of the way
25	photoelectric detectors are designed the normal the

1	COMMITTEE ON HOUSING AND BUILDINGS 58
2	professional quality not the ones that are sold at
3	\$9, I don't deal with those, I don't know. A
4	professional quality smoke detector will sample the
5	air in the chamber about every 8 seconds. At this
6	first moment that it senses smoke, it will it will
7	up, it will boost that sample rate to once every
8	three seconds. After three of those samples still
9	detecting smoke it will go into an alarm, so at the
10	minimum it's going to go into alarm at nine seconds
11	or eight seconds at the maximum it going to into
12	alarm at 17 seconds once there smoke in the chamber.
13	CHAIR WILLIAMS: Now you just make a
14	differentiation you said the ones that are being sold
15	are different than the ones you're talking about.
16	RICHARD CANTOR: I have never tested and
17	I don't have statistics on consumer grade detectors.
18	We do not use those detectors because their an
19	inferior quality to the ones we do. But I have to
20	respect something.
21	CHAIR WILLIAMS: When you say we.
22	RICHARD CANTOR: We the industry, our
23	industry. If you go as a fire alarm company to a
24	fire alarm distribution, distributor and you ask that
25	the ones I buy to put in client or clients businesses
	l de la constante de

1 COMMITTEE ON HOUSING AND BUILDINGS 59 2 or homes they cost me \$35 way above the level that 3 the consumer in New York City that you're going to consider. 4 CHAIR WILLIAMS: I don't think that 5 accurate, they... they there's smoke detectors that. 6 7 RICHARD CANTOR: Ok, well what I'm saying is I've never tested the ones that come out of Home 8 9 Depot that are first (inaudible) but I have tested ours and they are built in technology to make sure 10 11 they don't false alarm and that they do detect very rapidly. 12 13 CHAIR WILLIAMS: Have you tested the same 14 high grade ionization smoke detectors? 15 RICHARD CANTOR: Yes we have but an 16 ionization to use the terminology in my book 17 ionization some detector is an oxymoron. And ionization smoke detector is not only not a smoke 18 19 detector it is impossible for an ionization to detect 20 smoke by the laws of physics and the laws of physics do not change for the New York City Fire Department, 21 they do not change for the City Council, they do not 2.2 23 change for anyone. The laws of physics are ... are the same for everything. An ionization detector actually 24 detect ions, that where the name ions comes from and 25

1 COMMITTEE ON HOUSING AND BUILDINGS 2 you can have as this demonstration showed to you 3 can have smoke being produced forever and an 4 ionization detector if it's just smoke is not get 5 to respond. If in combination with the smoke t 6 are ionized particles it will react. A photoel 7 detector on the other hand is created with a 8 different law of physics the laws optics. 9 CHAIR WILLIAMS: So I I also try and 10 discompare apples to apples, because you're tal 11 about the higher grade photo electronic smoke 12 detectors I guess comparing it to higher grade 13 ionization smoke detectors. 14 RICHARD CANTOR: Well I think we were 15 the tracks a little a bit because you asked me, 16 asked me how fast it would respond. 17 CHAIR WILLIAMS: Yep. 18 RICHARD CANTOR: A photoelectric and 19 giving you an answer that in my knowledge the o 20 photo that I've tested are the ones we use. 21 CHAIR WILLIAMS: At the \$35 price pc	
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21 CHAIR WILLIAMS: At the \$35 price po	
	int.
22 RICHARD CANTOR: So so that's why w	e got
23 a little bit off but but but.	
24 CHAIR WILLIAMS: I just want to make	
25 sure	

1 COMMITTEE ON HOUSING AND BUILDINGS 61 2 RICHARD CANTOR: Yes, a photoelectric of 3 any type and manufacture will respond very rapidly. 4 CHAIR WILLIAMS: Ok thank you. 5 RICHARD CANTOR: Within seconds rapidly. CHAIR WILLIAMS: Thank you. 6 7 RICHARD CANTOR: May I add one other 8 thing to this. 9 CHAIR WILLIAMS: Go. RICHARD CANTOR: I think it because 10 11 there's miss information that sent you way that we 12 have to parce. I can give you an analogy but let try 13 and give it to you straight and if ... if you need it 14 needs clarification let me clarify it. A 15 photoelectric detector will detect smoky fires 16 extraordinary faster than ionization detectors you 17 just saw an example. 18 CHAIR WILLIAMS: Was that a Home Depot 19 one or your \$35 one? 20 RICHARD CANTOR: Oh that was a News, 21 they... they picked it I have no idea that's New13 2.2 Eyewitness in Indiana but they're ... there are dozens and I have dozens of other test. 23 CHAIR WILLIAMS: Ok. 24 25

2 RICHARD CANTOR: Same thing, same results 3 every time. Texas A&M let me stop for a moment and 4 give you a few resources that you can have on your You can go to YouTube yourselves, type in 5 own. aquarium smoke test and that demo will come up and a 6 7 lot more. You can also go to Wikipedia on the 8 internet and pick up this report on smoke detectors, 9 excellent report. So you don't have to take my word I bought two three ring binders that you're 10 for it. welcomed to examine. The first one is actually a 11 series of letters back and forth in communications 12 13 back and forth with the Major of the City with the 14 fire commissioners, with the chief of fire prevention 15 and interesting enough with the speakers of the City 16 Council. I've testified here three or four times 17 previously and over approximately I think the first 18 letter I have in here is 1998, so over all those 19 years and virtually nothing's happened and why 20 nothing has happened, a lot of it is you hear 21 testimony that you just heard previous to mine from 2.2 the fire department no one can answer your questions 23 (inaudible) because they don't get the support they need from the US Fire Administration and since they 24 don't get the support their not trained in this field 25

1	COMMITTEE ON HOUSING AND BUILDINGS 63
2	and they know fire rescue and fire suppression
3	extraordinarily well and god know if I was ever in a
4	fire these are the guy I want coming to rescue me,
5	but they do not know fire prevention and that's the
6	problem and you witness that in the testimony this
7	morning. They don't have the information because
8	they're not supported.
9	CHAIR WILLIAMS: Ok.
10	RICHARD CANTOR: It's not their fault.
11	CHAIR WILLIAMS: All right.
12	RICHARD CANTOR: I'm not point the
13	finger.
14	CHAIR WILLIAMS: Thank you.
15	RICHARD CANTOR: They don't get the
16	support they need.
17	CHAIR WILLIAMS: Thank you and were
18	joined by Council Member Levine and I think Council
19	Member Crowley has some questions.
20	COUNCIL MEMBER CROWLEY: Thank you Mr.
21	Cantor for being her and for your testimony. I I
22	agree with what you're saying about the fire
23	department, they've got the operations down and
24	they're the best fire department in the entire
25	Country but they're not doing their investigation

1 COMMITTEE ON HOUSING AND BUILDINGS 64 2 well enough to know that if they implemented this 3 change they could prevent a vast, a good number of 4 had the 75 people who died last year had a photoelectric smoke detector most of them would still 5 be alive today. And they didn't even know of the 18 6 7 died with a working smoke detector what kind that 8 was. But what you said in your testimony that 9 ionization really isn't like a smoke detector is it like a fire detector. 10

11 RICHARD CANTOR: Ionization in my professional should not be labeled, it should be 12 13 outlawed that you can say it's... it's no more a smoke 14 detector than a horse or a donkey or a goat is. An 15 ionization detector is not a smoke detector, it's an ionization detector. It's calling some and it a 16 17 misnomer when... when you put an ionization detector 18 and a photoelectric detector and you value them the 19 Let me give you an analogy that maybe helpful same. 20 to lay people. Let pretend for a second that we 21 wanted to detect whether it was going to rain outside 2.2 and we had two people to assist us and one of those 23 people was deaf and the other person was blind and we sent them out and we said we want you to tell us and 24 warn us when it's going to be ... be raining. Well the 25

1	COMMITTEE ON HOUSING AND BUILDINGS 65
2	person that can see that is not blind can look and he
3	can see clouds gathering very early, he can see if
4	they darken very early, if it started to rain he can
5	see the rain very clearly but the person who's deaf
6	will never be able to see the, I'm sorry the person
7	who's blind will never be able to see the gathering
8	clouds early enough to give you a warning. Never
9	maybe even be able to see it raining. Maybe if it's
10	thundering and lighting the person who is blind can
11	sense that there rain out there. So in a way it's
12	angst to ionization photoelectric. A photoelectric
13	detector when it gets the earliest indication there's
14	a fire through smoke is going to alert the occupants.
15	An ionization if there is not a lot of high energy
16	combustion in those particles is not it's going to
17	sit there and it's not going to go off at all any
18	more than a blind person can look out the window and
19	see whether it's raining. So in my profession
20	opinion I have solicited a response I've encouraged
21	the NFPA which I've been a member of that writes the
22	codes, I said you know we've really got to do the
23	public a better service. Now Elizabeth I'd like to
24	comment on something you made because I want to make
25	something very very clear. This is a critical first
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1	COMMITTEE ON HOUSING AND BUILDINGS 66
2	step. You on the City Council are more important
3	than anyone on earth to pass this legislation and to
4	save lives. Not the fire department, not me as an
5	expert, not NFPA because if you pass this
6	legislation, which you should it will start saving
7	lives immediately and it will save lives forever into
8	the future and that what I encourage you to do. But
9	I do want to make clear one thing, this is only the
10	beginning. Why is it only the beginning? Because
11	fire safety is much more complicated and involved.
12	In many residential housing units you need more than
13	one detector because the purpose of the detector is
14	first and foremost if you're asleep when you're most
15	vulnerable to wake you up, so it better be in the
16	bedroom. And then when you are awaken you need a
17	safe way to escape, so you need additional detectors
18	along your escape path. If there's more than one
19	bedroom, you need additional detectors. So in number
20	one you need the light detector. Number two you need
21	enough of them in the right place. Number three you
22	have to start talk about the the annunciation
23	because we know today that people that are hard of
24	hearing will not hear often the 85 decimal alarm. We
25	know that children amazingly are in an adult mind or

1	COMMITTEE ON HOUSING AND BUILDINGS 67
2	brain does not work the same as a young child. Young
3	children up through their teenage years often will
4	not wake up to a blaring smoke detector that would
5	make your skin crawl if you're an adult like we are
6	but the children sleep right through it. So from the
7	proper type of technology which is photoelectric, to
8	silicate number in the proper locations, the the
9	announation, all of these things are issues but it
10	starts with having the right detection. And I
11	applaud you Elizabeth Crowley because no one that
12	I've met in 30 years has been more concerned and more
13	right and accurate that this should be done and I
14	thank you and the City Council as far as I'm
15	concerned should bless you for your effort and Jeff
16	Mailman (sic) has been outstanding in devoting hour
17	and hour to investigating on his own and taking me to
18	task and you know beating me up. It's very important
19	you do this. Chairman Williams I don't think there's
20	anything more important you can do and to save the
21	people that you represent. That's how strongly I
22	feel about this. One last, one last, may I say one
23	last thing, this will be the last thing. One of the
24	things I've suggested and if I'm out of place here
25	please forgive me. I believe that the technical
	l de la constante de

1	COMMITTEE ON HOUSING AND BUILDINGS 68
2	aspects of fire protections should be put under the
3	jurisdiction and oversight of the Committee on Fire
4	Safety and Criminal Justice and only the… the
5	building related fire safety issues should be left
6	with the building department. And what I mean by
7	that is this standard which is the, and this is the
8	currents standards that we're using for fire
9	detection in New York City right now. It's NFP 72,
10	it's a national fire alarm code, it's the 2010
11	version which is the one the City is using. For
12	buildings and what you do for fire escapes, for fire
13	exit doors and everything, there's a different code
14	that code NFP 101 which is the life safety code. The
15	life safety code should remain with the building
16	department but I believe that Chairman Williams that
17	quite frankly that that the technical aspect should
18	should be would be well served to be passed over to
19	the Committee on Fire and Criminal Justice.
20	COUNCIL MEMBER CROWLEY: Thank you Mr.
21	Cantor for your testimony and I just want to say that
22	they were a lot of different organizations that
23	submitted testimony but in particular I think it's
24	important to note that the Uniform Fire Fighters
25	Association of Greater New York which represents our

1	COMMITTEE ON HOUSING AND BUILDINGS 69
2	over 10,000 fire fighters and people who are out
3	there working to keep New York City safe also support
4	this legislation. Thank you.
5	RICHARD CANTOR: I'd like to conclude if
6	I may by just saying I have a summary of things that
7	would be interesting to the Council because the
8	entire world, I'm talking about Western world anyway.
9	The United Kingdom, Australia, Canada everyone
10	including municipalities within the United States are
11	moving toward photoelectric because they've done the
12	research now and we've moved forward. In June of
13	2006 the Australian fire and emergency service
14	authorities Council the peak represented body for all
15	Australian New Zealand fire departments published an
16	official report position on smoke alarm and
17	residential accommodations which states the that
18	ionization smoke detectors may not operate in time to
19	alert occupants early enough to escape from
20	smoldering fires. In August of 2008 the
21	International Association of Fire Fighters
22	representing over 300,000 members throughout the US
23	and Canada passed a resolution recommending the use
24	of photoelectric smoke alarms. In May of 2011 the
25	Fire Protection Association from Australia official

1	COMMITTEE ON HOUSING AND BUILDINGS 70
2	position on smoke alarms stated, fire prevention
3	association Austria considers that all residential
4	building should be fitted with photoelectric smoke
5	detectors. I can go on and on and on but there a
6	list, this by the way is available on the internet in
7	that, in that article that I told you in smoke alarms
8	and.
9	CHAIR WILLIAMS: You got it.
10	RICHARD CANTOR: Last case Massachusetts
11	has adopted as you know. In the last five year
12	Massachusetts has gone from the State at the $15^{ th}$
13	level for fire fatalities all the way up to the 3^{rd} ,
14	so they have of their the 3^{rd} best state in the
15	Country within just 5 years for putting in
16	photoelectric detectors.
17	CHAIR WILLIAMS: It's safe to say you
18	support the bill.
19	RICHARD CANTOR: Absolutely and I applaud
20	you as well. I really do have tremendous respect
21	because when I listen to some of the testimony over
22	the years that you've, I don't know how you put it
23	together and you already before I came to this table
24	already had had hit the nail on the head that
25	photoelectric is the way to go.

1 COMMITTEE ON HOUSING AND BUILDINGS 71 CHAIR WILLIAMS: Thank you very much and 2 3 a lot of that is thanks to the Council Member Crowley and her leadership on this, I also thank her, thank 4 5 you for your testimony. RICHARD CANTOR: Thank you so much. 6 7 CHAIR WILLIAMS: I very much appreciate it and thank you for answering our questions. 8 9 RICHARD CANTOR: Ok and if I can help in the future, please I'm really, please call on me. 10 11 CHAIR WILLIAMS: Thank you. All right we have no one else who signed up to testify. We have 12 some testimony for the record; California Real Estate 13 14 Inspection Association, Deputy Chief of the Boston 15 Fire Department, Fathers for Fire Safety and UFA. 16 With that will say this hearing is are we finished, 17 hearing is now finished, thank you. 18 [gavel] 19 20 21 22 23 24 25

CERTIFICATE

World Wide Dictation certifies that the foregoing transcript is a true and accurate record of the proceedings. We further certify that there is no relation to any of the parties to this action by blood or marriage, and that there is interest in the outcome of this matter.



Date ____ November 17, 2015