

CITY OF MIAMI SEA LEVEL RISE COMMITTEE

Miami City Hall  
3500 Pan American Drive  
Miami, Florida 33133

November 9th, 2015

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APPEARANCES :

COMITTEE MEMBERS :

- WAYNE PATHMAN, CHAIR
- TABITHA CALE, VICE CHAIR
- REINALDO BORGES
- JOSEF REGALADO
- PETE GOMEZ

CITY STAFF :

- AJANI STEWART, LIAISON
- MATTHEW S. HABER, ASSISTANT CITY ATTORNEY

ALSO PRESENT :

- STEPHANIE TASHIRO
- BRIAN LEMMERMAN

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THEREUPON:

(Meeting Commences.)

CHAIR PATHMAN: Good evening, everybody.

UNKNOWN SPEAKER: Good evening.

CHAIR PATHMAN: Welcome to the second meeting of the City of Miami Sea Level Rise Committee.

My name is Wayne Pathman. I'm the Chair of the committee and I'd like to go around the room and introduce the other members of the committee as this time starting from my left.

MR. BORGES: Hello. Good evening. Reinaldo Borges, a member of the committee. I'm an Architect, as well; Architect Activist.

MR. REGALADO: Jose Regalado, member of the Sea Level Rise Committee; underwater photographer and cinematographer.

MR. GOMEZ: I'm Pete Gomez. I'm the city's Emergency Manager.

VICE CHAIR CALE: I am Tabitha Cale. I'm a Vice-Chair, maybe, still tonight. We have to re-vote. It was on the agenda. I think that will be coming up. And then, I work for Audubon Florida and my academic background is also in climate change policy.

1 CHAIR PATHMAN: Okay. Very good. Ajani, if  
2 you could just make a quick announcement about the  
3 two members that are not here.

4 It would probably be good to put that on the  
5 record.

6 MR. HABER: Do we want to talk about who is  
7 not here or --

8 CHAIR PATHMAN: Just mentioned that there are  
9 two other members and who they are and I think it's  
10 appropriate to say why they're not here.

11 MR. HABER: I think as far as why that's more  
12 (indiscernible) disclose --

13 CHAIR PATHMAN: Okay.

14 MR. HABER: -- you know whether or not they're  
15 (indiscernible). But, it's David Martin who is not  
16 present and James Murley is also not present.

17 CHAIR PATHMAN: Okay. Let's go and look at  
18 the minutes of -- Johnnie, do you have the minutes  
19 from the last meeting?

20 MR. STEWART: (Indiscernible).

21 CHAIR PATHMAN: Okay. Here we go.

22 MR. STEWART: Do you want to give them the  
23 other introduction?

24 CHAIR PATHMAN: No. I'm going to save the  
25 other introductions for the public. I wanted to

1 get started some of the housekeeping things first.

2 MR. STEWART: Okay.

3 CHAIR PATHMAN: So any motion to adopt the  
4 minutes?

5 VICE CHAIR CALE: I motion.

6 MR. REGALADO: Second.

7 CHAIR PATHMAN: Okay. Tabitha moves to  
8 approve the minutes.

9 MR. REGALADO: I'll second.

10 CHAIR PATHMAN: Jose moves to second it. All  
11 of those in favor of approval of the minutes from  
12 the first meeting please say aye.

13 (Thereupon, responses were in the affirmative.)

14 CHAIR PATHMAN: Any opposed?

15 (Thereupon, no responses were heard.)

16 CHAIR PATHMAN: And any abstentions?

17 (Thereupon, no responses were heard.)

18 CHAIR PATHMAN: Seeing none, the minutes are  
19 hereby adopted.

20 Now, just a little housekeeping. We have to  
21 have a re-selection of our Committee Vice-Chair  
22 because the last time, if you recall, we did it by  
23 ballot and we need to do it openly as opposed to by  
24 ballot.

25 So, that being said -- You can feel free to

1 nominate yourself, by the way. You can do that.

2 We need nominations for those that wish to be  
3 the Vice-Chair.

4 MR. HABER: I think you need a motion to  
5 reconsider first.

6 CHAIR PATHMAN: Okay. Motion to reconsider  
7 first, then.

8 We need a motion to reconsider.

9 MR. GOMEZ: I make a motion we reconsider.

10 CHAIR PATHMAN: Okay. Pete.

11 MR. REGALADO: I will second it.

12 CHAIR PATHMAN: Jose seconds it. All of those  
13 in favor of reconsideration of the motion to elect  
14 the Vice-Chair, please say aye?

15 (Thereupon, responses were in the affirmative.)

16 CHAIR PATHMAN: Opposed?

17 (Thereupon, no responses were heard.)

18 CHAIR PATHMAN: Any abstentions?

19 (Thereupon, no responses were heard.)

20 CHAIR PATHMAN: None? Seeing none the motion  
21 is adopted and it passes.

22 Now, we need a motion for those that wish to  
23 be Vice-Chair. Okay?

24 VICE CHAIR CALE: I'm happy to continue  
25 serving in the role as Vice-Chair. I would

1 nominate --

2 MR. GOMEZ: I second the motion.

3 CHAIR PATHMAN: Tabitha has nominated herself  
4 pursuant to our last motion.

5 Pete is seconding it.

6 Okay. I have a second.

7 Anybody else wish to be considered for the  
8 Vice-Chair position?

9 MR. STEWART: Is that open to the room or only  
10 the members?

11 CHAIR PATHMAN: No; only the members.

12 VICE CHAIR CALE: (Indiscernible).

13 MR. STEWART: Well, I figured I would ask.

14 CHAIR PATHMAN: Seeing none, we will close the  
15 nominations and we'll take a vote.

16 All of those in favor Tabitha being the Vice-  
17 Chair of the Sea Level Rise Committee for the City  
18 of Miami, please say aye.

19 (Thereupon, responses were in the affirmative.)

20 CHAIR PATHMAN: All of those opposed?

21 (Thereupon, no responses were heard.)

22 CHAIR PATHMAN: Any abstentions?

23 (Thereupon, no responses were heard.)

24 CHAIR PATHMAN: Seeing none, the motion  
25 passes. Tabitha, again, congratulations on being

1 the Vice-Chair of the Sea Level Rise Committee.

2 VICE CHAIR CALE: Thank you.

3 CHAIR PATHMAN: Okay. All right. And now we  
4 have our City Administration Staff Report which  
5 Ajani Stewart will give to us.

6 MR. STEWART: Sure. I'm Ajani Stewart, City  
7 of Miami, Office of Sustainable Initiatives.

8 Since we last met the biggest hot topic that I  
9 wanted to brief the committee on was our  
10 co-application with the City of Miami and Miami-  
11 Dade County on the Rockefeller Funded Hundred  
12 Resiliencies under the Resilient Cities Grant.

13 This grant is designed to help cities become  
14 more resilient to social, physical, economic  
15 stresses and challenges that they face.

16 In our instance, such as hurricanes,  
17 infrastructure failure, coastal flooding, rainfall  
18 flooding, where the shocks to our system that we've  
19 identified with our co-applicants as the challenges  
20 that are affecting us most prevalently.

21 And then, also, they're compounded by the  
22 stresses that we face in our communities such as  
23 pronounced poverty, a poor transportation network,  
24 lack of affordable housing and sea level rise was  
25 identified as our number one stressor on our



1 communities.

2 So, it's a shared problem between these  
3 municipalities. So we've bonded together in a  
4 collaborative effort to apply for this grant which  
5 if we're successful, as these three entities, we  
6 will have each a position funded called the Chief  
7 Resiliency Officer Position, which reports to the  
8 Mayors in each city and it's designed to help the  
9 City to design and develop a resiliency strategy  
10 for action in going forward to making these cities  
11 more resilient to these shocks and stressors.

12 Also, the grant provides for technical  
13 assistant from the Rockefeller Foundation and the  
14 100 Resilient Cities Program and also membership in  
15 the global network and peer exchange and peer  
16 learning through that network.

17 Currently, the grant is in its -- the program  
18 is in its third rounds of applications. There are  
19 only thirty-three slots left.

20 Along with our urge and desire to collaborate,  
21 is also something that we received -- the three  
22 entities, that it is to our advantage to  
23 collaborate together and that is what will make our  
24 application more competitive.

25 So that application is due November 24th and

1 we are currently going on with some writing  
2 exercises between Miami Beach, Miami-Dade County  
3 and the City of Miami and, hopefully, we will be  
4 successful in getting that grant.

5 Stephanie, is there anything you want to add  
6 to that or that, kind of, cover it?

7 MS. TASHIRO: No, that's it.

8 MR. STEWART: Okay. Stephanie, works me on  
9 that grant also.

10 So, that's the major update affecting --  
11 potentially affecting this committee from City  
12 Administration this week -- this month.

13 CHAIR PATHMAN: So, the three applicants are  
14 the City of Miami, Miami Beach and --

15 MR. STEWART: And Miami-Dade County.

16 CHAIR PATHMAN: -- the county, Miami-Dade  
17 County?

18 MR. STEWART: Correct.

19 CHAIR PATHMAN: No other municipality --

20 MR. STEWART: No. No. With Miami-Dade County  
21 being identified as the lead (indiscernible)  
22 capacity.

23 CHAIR PATHMAN: Okay.

24 MR. GOMEZ: We've applied for this grant.

25 This is our third go around.

1 MR. STEWART: Right.

2 MR. GOMEZ: We've not been successful in the  
3 other two events -- previous attempts and we got  
4 feedback. We would have a much better chance of  
5 achieving it if we collaborated with those other  
6 entities.

7 MR. STEWART: And we are meeting regularly to  
8 go over plans and exercises for the application and  
9 we are wrapping that up soon.

10 CHAIR PATHMAN: When is the application due?

11 MR. STEWART: November 24th.

12 CHAIR PATHMAN: November 24th? And -- So, we  
13 won't have another meeting before then?

14 MR. STEWART: We will not.

15 CHAIR PATHMAN: Is it possible to give the  
16 committee members some additional information to  
17 see the application in case we wish to, you know,  
18 help or assist in any way or weigh in on it?

19 MR. STEWART: Can I get back to you on that  
20 one?

21 CHAIR PATHMAN: You can.

22 MR. STEWART: Okay. All right.

23 CHAIR PATHMAN: Because, I think, you know, as  
24 a committee we might be able to be helpful since  
25 the city has gone through this process before --

1 MR. STEWART: Right.

2 CHAIR PATHMAN: -- and, maybe, we can add some  
3 help there.

4 Okay. Moving right along then. Is there  
5 anything, Ajani, from the staff or city  
6 administration?

7 MR. STEWART: Nothing else right now.

8 CHAIR PATHMAN: Okay.

9 MR. SHEDD: Sorry. I'm Ryan Shedd from the  
10 Planning Department.

11 CHAIR PATHMAN: Oh, okay. Ryan, welcome.

12 MR. SHEDD: I didn't get this on the agenda  
13 earlier. But, I missed the last meeting. So, I'll  
14 be showing up as a representative from the Planning  
15 Department.

16 I have the update to our water supply plan  
17 which is, actually, containing all of our updated  
18 language on sea level rise and climate change.

19 It's, sort of, our first step into updating  
20 our whole comprehensive plan.

21 So, this is, actually, effective as of last  
22 week, I think.

23 So, I have one copy. It's available on the  
24 website as well. I'll pass it around.

25 We adopted language from Miami-Dade County who

1 we are a customer of for our water supply.

2 So, we're using a lot of the same language,  
3 adopting a lot of the same policies.

4 And as a segue, this is, sort of, a prequel to  
5 the evaluation appraisal reporting which we'll be  
6 doing throughout the next year, which is updating  
7 our full comprehensive plan.

8 So, we'll be reaching out to the public and  
9 commissioners to formulate new policies which will  
10 included everything from education to sea level  
11 rise and climate change.

12 So, this is -- will be like a little sneak  
13 preview. But, this is effective as of last week.

14 UNKNOWN SPEAKER: Okay.

15 CHAIR PATHMAN: What was your last name again?

16 MR. SHEAD: Shedd, S-H-E-D-D.

17 CHAIR PATHMAN: Thank you.

18 MR. GOMEZ: What department do you work for?

19 MR. SHEDD: Planning and Zoning.

20 MR. STEWART: And is that something you have  
21 electronically that I can distribute?

22 MR. SHEDD: So that's -- We just uploaded the  
23 new --

24 MR. STEWART: Right.

25 MR. SHEDD: -- new comprehensive plan on the

1 website --

2 MR. STEWART: Okay.

3 MR. SHEDD: -- a couple of weeks ago.

4 MR. STEWART: All right.

5 CHAIR PATHMAN: Are there any other staff  
6 members here or any from the city that wishes to be  
7 recognized? And I know I've got my back to  
8 somebody.

9 UNKNOWN SPEAKER: Yes.

10 MR. TASHIRO: I'm not from the city. I'm the  
11 City's Hazard Mitigation/Disaster Recovery  
12 Specialist. I work for Chief Gomez, my supervisor.

13 CHAIR PATHMAN: And anything that you wish to  
14 comment on staff perspective and are you planning  
15 on attending our meetings in the future on a  
16 regular basis?

17 MS. TASHIRO: Yes.

18 CHAIR PATHMAN: Okay.

19 MS. TASHIRO: What we do in hazard mediation  
20 is we work with other city departments to develop  
21 projects to protect the city from disasters, to  
22 mitigate the effect of disasters. So a lot of the  
23 projects address whether we (indiscernible) and  
24 anything else that could affect the  
25 (indiscernible). We take an all hazards approach.

1 MR. GOMEZ: We applied. She -- Her shop  
2 applies for grants whenever we find grants that are  
3 available, that can help the cities or the  
4 residents. We try to apply for them as much as we  
5 can.

6 MS. TASHIRO: We work with FEMA (Federal  
7 Emergency Management Agency events --

8 MR. GOMEZ: A lot with FEMA.

9 MS. TASHIRO: -- and then post-disaster, we  
10 also work with FEMA for the (indiscernible) --

11 UNKNOWN SPEAKER: Like emergency management?

12 MS. TASHIRO: -- and the different  
13 (indiscernible) provide. This is Lillian, she's  
14 the --

15 CHAIR PATHMAN: Hi, Lillian.

16 MS. BLONDET: Hi. How are you?

17 CHAIR PATHMAN: Good. How are you?

18 MR. BLONDET: Good. Thank you. I'm Lillian  
19 Blondet. I'm the Director of Grants Administration  
20 and Sustainable Initiatives. I work with Ajani who  
21 represents Stephanie and the Chief.

22 My department submits applications on behalf  
23 of other city departments to obtain funds for all  
24 different kinds of programs including many -- you  
25 know, Rockefeller Foundation and many other grants

1 for projects and we put out programs and implement  
2 programs like tree give-aways and tree planting  
3 events. And we're looking forward, you know, to  
4 continue this relationship with everybody in the  
5 community. There's a lot of work that is being  
6 identified in the community and in the U.S.; work  
7 that needs to be done and -- The city as well as  
8 the county are very much in need of (indiscernible)  
9 --

10 CHAIR PATHMAN: Okay. Well, thank you.

11 MS. BLONDET: -- sea level rise and changing  
12 weather conditions.

13 CHAIR PATHMAN: I hope when this committee  
14 comes up with solutions that you'll have the money  
15 to pay for them.

16 MS. BLONDET: Oh, sure.

17 CHAIR PATHMAN: At this time -- I'm not going  
18 to ask everybody in the room to introduce  
19 themselves because we do have an agenda and at some  
20 point we will have comments from the public and at  
21 that time I'll ask you to introduce yourself.

22 We have four topics from our prior meeting  
23 that we wish to discuss in a little bit more detail  
24 tonight under our on-going business and I'm going  
25 to give each person who is discussing those four



1 topics about ten minutes to speak on that topic and  
2 then we can take some questions on a topic by topic  
3 basis and then we'll move into new business.

4 So, let me start with Pete, with you, with the  
5 emergency management and the sea level rise issue  
6 in the City of Miami.

7 MR. GOMEZ: Yeah. We discussed this a little  
8 bit at the last meeting; that I look at it from a  
9 different perspective than most people because, you  
10 know, we're responsible for the provide services to  
11 the city.

12 So when we look at this, the climate change  
13 and the sea level rise -- And, I want to focus more  
14 on the climate change at this time; because, the  
15 sea level rise is coming.

16 What -- What -- How does that effect us?

17 Well, it effects us in our preparedness, the  
18 response and the recovery aspect of disasters and  
19 that's, basically, what we do. And, what we do,  
20 pretty good, I think.

21 So, we've got to take a look at certain  
22 things. The population has increased in the world.  
23 A lot of that population happens to be settling in  
24 our urban areas.

25 Why? Because there are jobs in the urban

1 areas and that's where they're coming to.

2 So, here we have this unique situation in the  
3 State of Florida. The State of Florida happens to  
4 be the third most populous state now and it's,  
5 probably, going to overtake other states pretty  
6 soon.

7 Well, the city -- the South Florida area  
8 happens to be -- happens to have thirty-three  
9 percent of the total population of the State of  
10 Florida. So, obviously, we're a very dense and  
11 we're very heavily populated area.

12 So when we look at the climate change -- when  
13 we look at global warming, what ends up happening  
14 -- what ends up happening is the waters out there  
15 in the ocean are getting warmer.

16 The climate throughout the whole world is  
17 rising at about a rate of two degrees for every so  
18 many years.

19 So as the waters rise what's going happen is  
20 that we're going to have more hurricanes. Right?  
21 Plus, the expansion of the water -- the expansion  
22 of the water is going to lead to that sea level  
23 rise.

24 So the more hurricanes we have -- the other  
25 thing that happens is that they're going to

1 increase in intensity.

2 As you heard, these hurricanes come more  
3 frequently. They're coming across stronger.  
4 They're going to create a lot more damage to our  
5 community and, obviously, it's going to impact the  
6 way we provide services to the citizens.

7 With the amount of personnel we currently have  
8 if a Cat (category) 5 hurricane were to hit Miami  
9 right now we wouldn't be able to conduct everything  
10 that we have to conduct. We'd be very dependent on  
11 the State of Florida and very dependent on the  
12 federal government to come in and assist us.

13 We always prepare -- and we tell the community  
14 prepare for 72 hours.

15 Let me tell you, if a Cat 5 hits this  
16 community it's going to be a lot more than 72 hours  
17 where people are going to be without services,  
18 power and other issues.

19 So, like I said, as the intensity increases --  
20 the hurricanes increase, it's going to tax our  
21 response and the services that we can provide to  
22 the citizens.

23 It's also going to provide more rain. We're  
24 seeing more rain. Everybody -- Nobody can deny  
25 that we have more rain.

1           As the rain increases we're seeing more  
2           flooding through the city. And, I saw a brief  
3           presentation where we're going to identify, I  
4           assume, some of the area where that flooding is  
5           taking place.

6           Well, what happens when that flooding takes  
7           place?

8           From the emergency response sector, we can't  
9           get to the people as fast as we need to get to the  
10          people.

11          In my world, when I can't get there fast  
12          people die. That's the way I look at it. That's  
13          the way I like to tell people. It's just that  
14          simple.

15          If I can't get there fast enough to help the  
16          people they're going to die.

17          So we need to prevent as much of that as  
18          possible.

19          Ajani, do you have those pictures?

20          MR. STEWART: Yeah.

21          MR. GOMEZ: I happened to take a picture. We  
22          were with Craig Fugate about a month ago. He came  
23          to visit us because we, by the way, very fortunate  
24          because we have two of the twenty-eight federally  
25          funded urban search and rescue teams that the

1 nation has. Two of them right are here in Dade  
2 County.

3 One is manned by the -- by the Miami-Dade  
4 County Fire Department and the other one is right  
5 here in the City of Miami.

6 So, we have one of the twenty-eight federal  
7 teams.

8 Craig Fugate happened to be coming down into  
9 town and we were showing him our shop; all of the  
10 equipment and our response that we do.

11 And, we happened to show him a picture of how  
12 far ahead we've started thinking.

13 So, we had some apparatus. You guys call them  
14 pick-up trucks. We call them apparatus; a fancy  
15 fire department name, that we were getting ready to  
16 put out of service. So, all we did was we pumped a  
17 few federal dollars into these pick-up trucks to  
18 start preparing for the sea level rise and the  
19 climate change that we're about to see.

20 Why did we do that? We've experienced it.  
21 We've responded to Katrina in Mississippi. We've  
22 responded to Katrina in Louisiana. And, we saw  
23 what could happen when you have that kind of  
24 flooding.

25 So, we're anticipating that to happen here the

1 next big event. So, we have to prepare for it.

2 (Thereupon, a discussion was held off the record.)

3 MR. GOMEZ: It's going to be quick. It's only  
4 two slides that I wanted to show.

5 All right. You can see this is just a simple  
6 old pick-up truck. Well, now, we've outfitted it  
7 so that we can get around just about -- No matter  
8 high the water is we're going to be able to get  
9 around it.

10 You don't see that very often. You don't see  
11 them on the streets because we don't people to  
12 think here we are, firemen, driving around, you  
13 know, in these fancy four-wheel drive vehicles and  
14 it's not. But, those are emergency response.

15 When Fugate saw that -- By the way, FEMA does  
16 not endorse that kind of thing when we go out the  
17 door on the urban search and rescue teams. But,  
18 when Director Fugate saw it he loved it.

19 He's from the State of Florida. He's from  
20 upstate. He's a true emergency manager. He's not  
21 (indiscernible). He's a true emergency manager and  
22 he's not a political appointee with a lack of  
23 experience.

24 And the other one I wanted to show is a little  
25 other thing that we've done on our own and it's a

1 simple scooter that you would think just provides  
2 emergency care.

3 Well, what we did is we went ahead and  
4 enhanced it. Instead of just having a little  
5 electrical scooter that is going to cost us,  
6 probably, three times as much as that scooter right  
7 there costs us. We -- What we did was we bought  
8 Polaris -- simple Polaris four by four vehicles --  
9 four by four -- that we can get around in and we  
10 made that ourselves.

11 We have a mechanic at the shop that designed  
12 that -- created that. Everything you see there  
13 with the exception of the wheels and the front part  
14 there, everything else was done in our shop.

15 With the amount of money that we were given to  
16 buy four little electric scooters we bought nine of  
17 these things doing it in-house.

18 So, we've -- I'm proud of that because we do,  
19 you know, take the fiduciary responsibilities very  
20 realistic and serious. But, again, it wasn't just  
21 about creating scooters to get around at special  
22 events -- at the, you know, Marlins Stadium,  
23 Coconut Grove Art Festival, Ultrafest.

24 No. We went ahead and started thinking, hey,  
25 what happens when we start getting floods? What

1 happens when we can't the vehicles around? We're  
2 going to use these things to get around as much as  
3 we can.

4 So, those are just two little things that  
5 we're doing within the fire department and the city  
6 to prepare. And, it's not prepare. It's adapt to  
7 the climate change, to the global warming.

8 All right. So, we're looking at more water.  
9 So as more waters rise we're going to have more  
10 people stranded. Every time a building goes up in  
11 the City of Miami these are not little buildings.  
12 These are fifty -- hundred-story buildings that are  
13 going up.

14 The way I sell it is, man, these are little  
15 cities that are going up.

16 So now imagine those little cities that don't  
17 have the proper generators. When a flood comes in  
18 and we've got standing water that's three or four  
19 feet high, guess what? Sewer systems ain't working  
20 anymore.

21 And, guess what? Now the water supply is not  
22 going to be working.

23 So what do I have? I have a bunch of people  
24 that are trapped in this building that we've got to  
25 go in and get out.



1           How does that affect us? We don't have the  
2 manpower to that. We just don't have the manpower.

3           How are we going to be able to take care of  
4 it? Eventually, we're going to have to distribute  
5 manpower or resources in other areas of the city to  
6 be able to accommodate all of those additional  
7 means that are coming our way and they are coming  
8 our way. Okay?

9           The other thing I ask is every time one of  
10 these buildings goes up, how many of them have the  
11 adequate generators to be able to provide back-up  
12 lighting, back-up electricity to all of these  
13 buildings?

14           And let's not just talk about residential  
15 buildings. How about the government buildings and  
16 all of the other buildings that are critical to the  
17 infrastructure of the city and the county  
18 government? Do we have them? Are we prepared? We  
19 need to augment that.

20           As far as I know, there is only one building  
21 in the City of Miami government that is able to  
22 keep going for about two weeks, period, and that's  
23 the policing college that has thousands of gallons  
24 of diesel fuel backing up those generator systems.

25           So, it's just -- It's a cost. It's a cost

1 analysis. It's how much it's going to cost us to  
2 do this. So it is another area that we need to  
3 consider.

4 So now we've got this global warming taking  
5 place. We've got the sea level rising. How is  
6 that going to affect the monetary hit that the  
7 citizens are going to take? And, when I say that,  
8 I mean what's the insurance cost going to be to all  
9 of these areas? How is it going to affect our  
10 community rating system? Anybody know?

11 Not yet. But, you know it's going to hit us;  
12 because, whenever they re-do the community rating  
13 system -- Which we're working on right now.  
14 Correct? To re-do it, our insurance rates are  
15 going to go up and that's just flat out economics.  
16 That's what is going to happen.

17 So the government has, you know, a flood  
18 insurance policy and they have programs that can  
19 help us. But, at the end of the day, when they see  
20 the sea level rising and the conditions are going  
21 to happen our rates are going to go up. You can't  
22 stop it. That's just economics.

23 All right. So, here's another interesting  
24 point and I found this earlier.

25 Currently, the percentage of population that's

1 65 or over is at about twelve percent. Okay? By  
2 2050, it's expected to increase to twenty-one  
3 percent. That's a dramatic increase on how that's  
4 going to affect us.

5 We have a very large elderly population in  
6 this city. And, where do all of these elderly  
7 folks live? They live in these high rises.

8 Again, how do we get them? Because, you know  
9 that when their power goes out -- when their  
10 electricity goes out, when their services go out  
11 they're going to call us. We have to get these  
12 folks out.

13 So imagine the increase that we're going to  
14 have in that elderly population by 2015.

15 Again, how is it going to tax the resources  
16 for the City of Miami? Not only Fire. But, we've  
17 got to talk about police. We're talking about  
18 public works. We're talking about sanitation. All  
19 of those services are going to be taxed by the  
20 continued rise of the seas. Okay?

21 The other area that I think we need to  
22 consider is as other parts of the world -- as  
23 they're being affected by the rising seas and the  
24 global warming where do they want to move to?

25 Let me tell you where they want to move to; to

1 the United States and we just so happen to get a  
2 lot of them here. So, our population is going to  
3 increase based on what's happening in other parts  
4 of the world.

5 So the other area that's going to affect us  
6 and you see it already. What are you going to do  
7 about it? Miami Beach is taking some steps to take  
8 care of it. It's our aging infrastructure. Okay?  
9 Water systems, sewer systems, our electrical grid.

10 If we were to have a three or four foot rise  
11 in sea level would our electrical system go down?  
12 Would it be able and capable of handling the water  
13 that's going to be hitting it? I don't know. I  
14 don't think so.

15 So those are all of the areas that I worry  
16 about.

17 So from an emergency management standpoint,  
18 emergency response standpoint, it's an area that we  
19 need to take serious. The government has to take  
20 it seriously and we need to start allocating,  
21 either, resources or a budget to it. But,  
22 somewhere along the line we have to start becoming  
23 very pro-active in this area. And, we talked about  
24 it last time, increasing the manpower needs, the  
25 equipment needs. Re-distributing is going to be

1 something that we have to seriously consider in the  
2 future.

3 CHAIR PATHMAN: Pete, I have a few questions  
4 for you.

5 With regards to the committee, what do you see  
6 our committee doing or recommending to either --

7 (Thereupon, a discussion was held off the record.)

8 CHAIR PATHMAN: What do you see, you know, our  
9 role in terms of helping you, you know, prepare for  
10 the future, prepare for today, you know, when you  
11 have the flooding issues and what recommendation we  
12 should be making as --

13 You mentioned about budgeting or finance,  
14 supplying manpower, you know, growing population.

15 How do you we, as a committee, then send that  
16 message to the administration that these are things  
17 that they need to start planning for today as  
18 opposed to tomorrow?

19 MR. GOMEZ: Yeah. The way I see this is,  
20 number one, I think we need to take a real,  
21 critical look at the infrastructure. We need to  
22 take a look at our roads. We need to take a look  
23 at our sewer system. We need to take a look at the  
24 water system. Are we capable of continuing to  
25 function the way we function right now if we're

1 going to have a foot, two feet of standing water in  
2 certain parts of the city?

3 So, I think that needs to be looked at.

4 I believe the county has several billion  
5 dollar projects in the works to replace sewer  
6 systems and --

7 I'm not sure. But, I know that it was  
8 discussed. I'm don't know where it stands.

9 So, that's big. That's a big area that needs  
10 to be addressed.

11 The other area that I think that needs to be  
12 addressed would go in a planning section of the  
13 city and, maybe, even the Fire Marshall's Office,  
14 where we need to make sure that when these  
15 buildings are being built that they're adequately  
16 powered. Are they going to have back-up  
17 generators? And, are those back-up generators --  
18 We can't -- You know, we can't talk about Mickey  
19 Mouse generators.

20 We have to make sure that they're going to  
21 have generators with enough power supply to be able  
22 to power a building for a couple of weeks because  
23 we cannot take a look at that 72 hour paradym that  
24 FEMA wants us to function under as being, you know,  
25 what we have to function in as a government.

1           We can dictate to the people, yes, try to  
2           function under 72 hours. But, in reality, it's  
3           going to be more than that.

4           So, those are big.

5           The other area is as we see the community  
6           growing, as we see the buildings getting taller and  
7           more people moving in to certain areas of the city  
8           then we need to take a good strategic look and find  
9           out where our emergency services need to be  
10          located. And, if we're having so many runs in an X  
11          part of the city then, guess what, we might have to  
12          build another fire station. We might have to put  
13          another police sub-station out there. We might  
14          have to do something like that. But, we need to  
15          take a look at that and strategically speaking, as  
16          the city grows, services have to grow with it,  
17          which in the past it hasn't.

18          I mean this administration, at least, has  
19          grown a little bit. We've collaborated with some  
20          of the development that's taken place and they're  
21          building us fire stations. But, we need to be more  
22          pro-active with that. We need to try to get as  
23          many structures built wherever we can.

24          CHAIR PATHMAN: From the committee members, do  
25          you see -- Does anybody wish to make a motion to

1 incorporate what we've just heard as a suggestion  
2 to the administration to plan better -- you know,  
3 for the future; deal with issues like current  
4 buildings having enough and the right kind of  
5 generators, potentially looking at sourcing out  
6 whether we need to have additional fire stations or  
7 police stations?

8 I think that's what, you know, the commission  
9 is looking for and I think we need to make, you  
10 know, a motion. So, I don't know. Maybe, Pete  
11 you're the best to, maybe, craft this particular  
12 motion tonight. Let's try to, you know, find the  
13 wording, if we can do that.

14 But before we actually do that, are there any  
15 questions from anybody here from the public about  
16 Pete's presentation?

17 MR. LEMMERMAN: Questions such as --

18 CHAIR PATHMAN: Could introduce yourself,  
19 please?

20 MR. LEMMERMAN: Sure. My name is Brian  
21 Lemmerman. I represent a project known called  
22 Colony One. We're a sustainability and  
23 permaculture education center.

24 Not so much questions; but, just suggestions  
25 and ideas to throw out there.



1           Are you accepting that at this time or do you  
2           wait until the public comments?

3           CHAIR PATHMAN: No. You could -- No; because,  
4           we're not going to go backwards later in the  
5           agenda. But, let's --

6           MR. GOMEZ: But, you want him to be specific  
7           to --

8           CHAIR PATHMAN: But, be specific to what --

9           MR. LEMMERMAN: Yeah, of course.

10          CHAIR PATHMAN: -- Pete has said.

11          MR. LEMMERMAN: Of course. Of course. Yeah.

12          So, speaking about emergency management, if  
13          we're dealing with heavy flooding or catastrophic  
14          situations like a hurricane and a lot of people are  
15          stranded, manpower is a huge issue.

16          There's the possibility of reaching out to the  
17          various communities throughout Miami and  
18          designating volunteer leaders within each community  
19          who can be emergency response units; because, we're  
20          not -- There's no way we're going to be able to  
21          find that many people in the municipal government  
22          to --

23          MR. GOMEZ: Right. Well, --

24          MR. LEMMERMAN: -- be on staff.

25          MR. GOMEZ: -- we actually have a problem.

1 It's CERT, Community Emergency Response Teams that  
2 we actually turn it over to the county because it  
3 was too much of a hodge-podge for us to do.

4 MR. LEMMERMAN: Exactly.

5 MR. GOMEZ: So, the county runs it. If you  
6 are interested in it we can put you --

7 MR. LEMMERMAN: Yeah.

8 MR. GOMEZ: -- in contact.

9 MR. LEMMERMAN: For sure.

10 MR. GOMEZ: You can call my office and we'll  
11 get you in touch with the right people. They'll  
12 come out. They'll do the training. They give  
13 kits.

14 As a matter of fact, we fund -- What it is?  
15 \$50,000 a year to the CERT teams and we can get  
16 each community -- As a matter of fact, there are  
17 lot of place that do the actual building where  
18 they'll have a CERT team within that building --

19 MR. LEMMERMAN: That's great.

20 MR. GOMEZ: -- and we can train them. And  
21 they'll teach them, you know, basic first aid, how  
22 to put out fires, who to call; just real basic  
23 things.

24 We look at them as a force multiplier for  
25 emergency response.

1 I believe you were up first?

2 MR. LEMMERMAN: Yes, sir.

3 MR. GOMEZ: I'm sorry, Mr. Chair.

4 CHAIR PATHMAN: Sure. Go ahead, Pete. You  
5 know, I can't (indiscernible) the Fire Department.

6 MR. GOMEZ: I --

7 MR. LEMMERMAN: But -- And then there's a  
8 couple of other things also.

9 There's the idea of potable water. We need  
10 water during the emergency situation. We also need  
11 power during the emergency situation.

12 MR. GOMEZ: Uh-huh.

13 MR. LEMMERMAN: I was looking through Exhibit  
14 A that was being passed around. I didn't see  
15 anything in there about rain water attachment.

16 If we're getting an increase rain fall, we  
17 have sixty-five inches, on average, per year, right  
18 now, in Miami that we can collect and purify and  
19 use as potable water.

20 I would love to see that incorporated in some  
21 sort of plan that can be widespread at the city and  
22 the county.

23 It just makes sense to do that here.

24 In terms of power, solar is the most reliable,  
25 renewable, non-carbon emitting energy source that

1 we've developed so far. And for the first time in  
2 history it's become cheaper than fossil fuel and  
3 that's just on the horizon.

4 So, outfitting all of our buildings with solar  
5 in the event of an emergency, at least, as back-up  
6 power would be great and then looking to the future  
7 to be able to supply a hundred percent of the power  
8 with solar would also be great.

9 But, these are two other things that mitigate  
10 --

11 MR. GOMEZ: Sure.

12 MR. LEMMERMAN: -- having to bring in water  
13 and food from the outside or having to have  
14 thousands of gallons of diesel fuel in tanks in our  
15 buildings and then, you know, burning fumes where  
16 people don't have adequate ventilation.

17 And then, in terms of food, for an emergency  
18 situation, encouraging micro-agriculture in --  
19 within condo buildings, within -- It doesn't work,  
20 so much, in emergency situations to have street  
21 trees and things like that if we're expecting  
22 flooding. But, in area higher up such as within  
23 building --

24 MR. LEMMERMAN: Vertical gardens. Yeah.  
25 Vertical gardens or even window gardens. Some

1 place where people will be able to grow the amount  
2 of food that they would be able sustain themselves  
3 for a week or to.

4 MR. GOMEZ: Right.

5 MR. LEMMERMAN: As it happens -- And, if  
6 there's any way that we can encourage those sorts  
7 of actions with policy, I think that would be  
8 appropriate.

9 MR. GOMEZ: Okay.

10 CHAIR PATHMAN: Okay. Who -- Over here?  
11 Next? Okay.

12 MR. McDOUGAL: My name is David McDougal and  
13 I'm with NextGen Climate, a national clean energy  
14 advocacy group.

15 I'm curious about generators for grocery  
16 stores and gas stations and hospitals and if that's  
17 part of the city's plan and the county's plan to  
18 make sure that those kinds of resources are  
19 available in all of the -- in all of the different  
20 areas that resident would be seeking them and,  
21 especially, as things -- as waters rise and there's  
22 less and less availability to get to certain spots  
23 if there's a lot of thought to making sure that  
24 we've got really good infrastructure like that --

25 MR. GOMEZ: Yes.

1 MR. McDOUGAL: -- in addition to all of the  
2 other infrastructures.

3 MR. GOMEZ: The answer is yes.

4 MR. McDOUGAL: Okay.

5 MR. GOMEZ: There's a very comprehensive list  
6 of all of the supermarkets that have emergency  
7 generators and gas stations and -- You know, all of  
8 the hospitals have emergency generators.

9 The point you bring up is where are those  
10 generators located; because, those of you that know  
11 -- Does anybody know what happened at Fukushima?

12 UNKNOWN SPEAKER: (Indiscernible).

13 MR. GOMEZ: Fukushima was, basically, a lack  
14 of adequate generators because they got -- you  
15 know, they got overcome by the water and the  
16 generators shut down so they had no way to cool the  
17 plant. That's why you have that disaster.

18 So that's another great point that you bring  
19 out, which I like to bring out, which is where are  
20 the generators located? Are they going to be in a  
21 flood zone where they're going to be overcome by  
22 the water and then those generators are useless.

23 MR. McDOUGAL: So is the length of time that  
24 those generators are ready for their capacity and  
25 their location and all of that public record? Is

1 that something that we know of now?

2 MR. GOMEZ: The county --

3 MR. McDOUGAL: Yeah.

4 MR. GOMEZ: -- has within their emergency  
5 management website -- They have a list of all of  
6 the generators and all of the gas stations in the  
7 county that have emergency generators at the gas  
8 stations. Yes.

9 VICE CHAIR CALE: There's a (indiscernible).

10 MR. GOMEZ: Now how long they last, I'm not  
11 sure of. But, --

12 MR. McDOUGAL: Yeah.

13 MR. GOMEZ: -- they do have generators.

14 VICE CHAIR CALE: There's a State of Florida  
15 statute that requires --

16 MR. GOMEZ: Right.

17 VICE CHAIR CALE: -- all gas stations to have  
18 generators that can operate for seventy-two hours.

19 MR. McDOUGAL: Okay. Do we know if that's  
20 being enforced or complied with and is that a role  
21 that the city commission should be playing at all?

22 MR. GOMEZ: That's a good question and I don't  
23 have that answer.

24 CHAIR PATHMAN: Yeah. Something --

25 MR. GOMEZ: As a matter of fact --

1 MR. GOMEZ: (Indiscernible) to this point --  
2 You brought it up on the --

3 CHAIR PATHMAN: Sir, can you just introduce  
4 yourself.

5 MR. A. GOMEZ: Albert Gomez.

6 CHAIR PATHMAN: Okay.

7 MR. A. GOMEZ: South Florida Resilient  
8 Systems. You brought it up in the inaugural, kind  
9 of, committee meeting --

10 MR. GOMEZ: Uh-huh.

11 MR. A. GOMEZ: -- and it's related to -- These  
12 are really big subjects.

13 MR. GOMEZ: Uh-huh?

14 MR. A. GOMEZ: You know, (indiscernible)  
15 infrastructure, roads, power, --

16 MR. GOMEZ: Uh-huh?

17 MR. A. GOMEZ: -- et cetera. But, you  
18 mentioned something which is as soon as you get  
19 into a disaster management standpoint -- You know,  
20 sea level rise is a slow rise. Storm surge is,  
21 probably, something that we're going to have to  
22 address with increased sea level rise, which is a  
23 compound effect.

24 MR. GOMEZ: Uh-huh?

25 MR. A. GOMEZ: So when you get activated from



1 an emergency management standpoint you mentioned,  
2 in the first meeting, that you'd like to have some  
3 mapping tools. You referenced lists now as well.

4 MR. GOMEZ: Uh-huh?

5 MR. A. GOMEZ: If we knew that every -- If the  
6 policy were to change that high rises were to be  
7 mandated to have secondary power sources so that  
8 the elderly don't get stuck in their building,  
9 which I've seen. I was at Sandy. I helped the  
10 elderly come down in buildings left alone and they  
11 had the National Guard.

12 MR. GOMEZ: Uh-huh?

13 MR. A. GOMEZ: But, if we had a map of every  
14 high rise and if they met compliance and that  
15 compliance was loaded on that list on a map, you  
16 visually could identify where your hot spots are,  
17 where you potential risk zones are and you wouldn't  
18 have to think about it; because, it would already  
19 be logged on to your mapping system.

20 And, you referenced that mapping is the  
21 biggest gap right now, in an emergency management  
22 standpoint, for you to be able to trigger.

23 And, I know that 311 is an incident control  
24 thing that Miami-Dade County has.

25 What are your feelings about harmonizing the

1 311 so that we can get more value to what you are  
2 already trying to map in an incident control or GIS  
3 format?

4 MR. GOMEZ: Okay. You said something that I  
5 said it was the biggest gap. I don't think it's  
6 the biggest gap. But, I do think it could be  
7 enhanced.

8 And, to what you're saying, we just had a  
9 presentation from a vendor that our IT (Information  
10 Technology) Department is working with to do  
11 exactly what you just said.

12 He's -- They're going to incorporate all of  
13 the buildings that have -- you know, that are  
14 critical infrastructures. They're going to map  
15 them and anything we want to put -- any kind of  
16 layer or sub-layer we want in there we can do that.

17 So, it's very easy for us to get the  
18 information. And, we have the information. I say  
19 the county, because it makes it easier for folks to  
20 go on to that county website and get it. We have  
21 those lists and we have those maps. We have all of  
22 this available. It's just putting it in a very  
23 friendly format like you speak where you can just,  
24 you know --

25 MR. A. GOMEZ: Yes. But, for --

1 MR. GOMEZ: Yeah. Yeah.

2 MR. A. GOMEZ: -- you to be able to access the

3 --

4 MR. GOMEZ: Right; exactly.

5 MR. A. GOMEZ: -- and pass --

6 MR. GOMEZ: Right. So, the city, believe it  
7 or not, is actually working towards that and the  
8 system does a lot of other things; asset tracking  
9 which is important for us, too. I need to know  
10 where all of my assets are, you know. And when you  
11 talk about assets, for me, it's not just, you know,  
12 an ax; you know, a broom. It's, you know, where  
13 are my front end loaders? Where are my fire  
14 trucks? Where are, you know, police vehicles?  
15 Where is all of that?

16 So, I need to know all of the assets that are  
17 available to us. Manpower -- You know, where are  
18 all of the employees? What are we going to do with  
19 all of the employees?

20 We've also looked at a way to -- It's a  
21 reverse 911 system, speaking of IT, so we can send  
22 messages out to the community when -- You know, it  
23 will dial you. It will dial your phone and it'll  
24 call you out and tell you, hey, this is the  
25 disaster that's on its way. This is what we need

1 you to start doing.

2 If there are mandatory evacuations it'll call  
3 everybody within the grid that we program into it  
4 and start telling them, hey, this is what you need  
5 to start doing.

6 MR. A. GOMEZ: Kind of like a silver alert;  
7 but, for emergency management or disasters.

8 MR. GOMEZ: It's a reverse 911. Instead of  
9 you calling in. It calls you.

10 So, -- We have other systems within the city  
11 to alert all of the city employees. As a matter of  
12 fact, we have two mass communication systems.

13 Yeah. We're --

14 MR. A. GOMEZ: I just thought that was  
15 something that, probably --

16 MR. GOMEZ: It's great. It's a great --

17 MR. A. GOMEZ: To know what road we're going  
18 harden or lift or raise --

19 MR. GOMEZ: Uh-huh?

20 MR. A. GOMEZ: -- we first have to track it  
21 and assess it and that assessment --

22 MR. GOMEZ: We --

23 MR. A. GOMEZ: -- should be citizen managed  
24 more than anything else because it's their back  
25 yard, you know, --

1 MR. GOMEZ: Right.

2 MR. A. GOMEZ: -- that they're protecting. So  
3 they should be -- have tools to be able to bring  
4 that value up to you guys and communicate it --

5 MR. GOMEZ: Right.

6 MR. A. GOMEZ: -- as opposed to not being on  
7 city hall.

8 CHAIR PATHMAN: Let's try to move on to the  
9 next person.

10 MR. GOMEZ: Okay.

11 MR. A. GOMEZ: It was just a comment.

12 CHAIR PATHMAN: I think there was a question  
13 in the back. Did you have a question?

14 No? Okay. Any other questions for Pete?

15 UNKNOWN SPEAKER: Yeah.

16 CHAIR PATHMAN: What?

17 MR. A. GOMEZ: I know it's outside of the  
18 geographical boundaries of the city proper; but,  
19 what about Turkey Point. It's at sea level and  
20 it's nuclear and if that thing gets hit what do we  
21 do?

22 MR. GOMEZ: Well, --

23 CHAIR PATHMAN: I think that's a question for  
24 another time.

25 MR. GOMEZ: Yeah.

1 CHAIR PATHMAN: I think that's really outside  
2 the jurisdiction and purview of, I think, our  
3 committee. But, someday, probably, at some point,  
4 we will take a --

5 MR. GOMEZ: I can tell you that we do have --

6 CHAIR PATHMAN: Okay.

7 MR. GOMEZ: -- radiological monitoring  
8 capabilities up and running --

9 MR. A. GOMEZ: Okay.

10 MR. GOMEZ: -- at a moment's notice.

11 MR. A. GOMEZ: So you can just tell people,  
12 like, move away from the thing?

13 MR. GOMEZ: Yeah. We can model -- Actually,  
14 it called --

15 CHAIR PATHMAN: You think?

16 MR. GOMEZ: -- plume modeling. We can tell  
17 you where that plume is heading.

18 MR. A. GOMEZ: Okay.

19 VICE CHAIR CALE: They have a real good  
20 emergency --

21 MR. GOMEZ: Notification.

22 VICE CHAIR CALE: -- plan from that site  
23 (indiscernible).

24 MR. A. GOMEZ: At the county level?

25 MR. GOMEZ: Uh-huh.

1           VICE CHAIR CALE: For the Turkey Point  
2 website.

3           MR. GOMEZ: Turkey Point and the county --

4           MR. A. GOMEZ: The Turkey Point website?

5           MR. GOMEZ: -- level, too.

6           VICE CHAIR CALE: Right. And from the  
7 county's perspective there is a Turkey Point  
8 exercise every year to craft this if something like  
9 that happened; how the county would respond.

10          MR. A. GOMEZ: Interesting. Okay.

11          MR. HABER: The city is in litigation relating  
12 to that.

13          MR. A. GOMEZ: Okay.

14          CHAIR PATHMAN: A lot of moving parts. I'd  
15 like to suggest, maybe, from the committee that --  
16 you know, we've heard a lot tonight; both what you  
17 presented, Pete, and the comments from our guests  
18 and the public. Maybe, if you have a chance to --  
19 between now and the next meeting, listen to just  
20 your seg -- this segment and come up with something  
21 that you -- you know, you want the committee to  
22 consider as a motion.

23          MR. GOMEZ: Okay.

24          CHAIR PATHMAN: Because, I think it's probably  
25 not wise to craft it tonight with all that we've

1 heard so that we can bring it back up, maybe, at  
2 the next meeting with all of the things that were  
3 discussed about infrastructure and, you know, the  
4 issues about manpower and vehicles and high rises  
5 and everything else so we can be intelligent about  
6 it as to what we're going to say to the  
7 administration and the commission.

8 If that's agreeable with the committee?

9 MR. GOMEZ: Sounds good. I can do that.

10 CHAIR PATHMAN: Does everybody agree?

11 Okay. That would be good. So, we don't have  
12 to actually have to pass the motion tonight.

13 And, if anybody here from the public that has,  
14 you know, made comments tonight wish to give us  
15 additional information --

16 Ajani, is there a way to get a hold of you --  
17 a website or something that we have?

18 MR. STEWART: Yeah. I'll give my contact  
19 information before the night is over.

20 CHAIR PATHMAN: Okay. So you can send  
21 something in that we can digest as a committee and  
22 then, in our next meeting, we can formulate the  
23 proper motion.

24 MR. GOMEZ: Okay.

25 CHAIR PATHMAN: Okay?



1 MR. GOMEZ: That sounds good.

2 MR. STEWART: Prior to the next meeting we  
3 should have that website up and running.

4 CHAIR PATHMAN: Okay. Very good. Thank you.  
5 Thank you very much, Peter.

6 MR. GOMEZ: You're welcome.

7 CHAIR PATHMAN: Next is a topic that -- It's  
8 something that I've been actually speaking about.

9 Perhaps I should try to stand up because we  
10 have a lot of people in the back -- everybody in  
11 the back.

12 The next is the issue of, you know, the  
13 economics of, you know, future sea level rise and  
14 flooding.

15 And, something that I, you know, have spent a  
16 lot of time getting a lot of knowledge about is the  
17 issue of insurance, taxation and banking and I  
18 think that those three issues are going to change  
19 dramatically over the next ten or fifteen years;  
20 long before we have a lot of plans in place to deal  
21 with sea level rise, long before the water gets  
22 here and in the streets on a daily basis.

23 Under the Federal Flood Insurance Program,  
24 which is administered by FEMA and funding by the  
25 Treasury Department, it's not a very good program.

1 FEMA is responsible for paying back the money to  
2 the treasury. They don't pay it back.

3 Currently, it's about Thirty Billion the hole,  
4 not including this year's funding for flood matters  
5 throughout the country.

6 In 2012 and then in 2014, Congress legislated  
7 to deal with the National Flood Insurance Program.  
8 They -- In 2014, which is a little bit more  
9 important than 2012, they modified the plan to say  
10 that they'll have ten percent increases in  
11 surcharges and that's, sort of, a temporary, you  
12 know, fix for the increased costs that the  
13 government is incurring for flood insurance. But,  
14 it's not realistic in terms of where it's going.

15 The most likely situation is that flood  
16 insurance will increase by fifty to two hundred  
17 percent over the next ten or fifteen years in areas  
18 that are high risk for special flood hazardous  
19 areas.

20 So, in the special flood hazardous areas,  
21 which is almost all of Miami Beach and a lot of  
22 Miami, those flood policies will be extremely  
23 expensive.

24 How that correlates with how it affects the  
25 banking industry is that bank securitize their

1 mortgages.

2 Under Fannie Mae/Freddie Mac you have to show  
3 that a person has the capability of paying the  
4 entire mortgage back at some point. And, usually,  
5 a lot those risks are covered by insurance.

6 In this case it would be flood insurance if  
7 it's a flood peril.

8 Most people buy flood insurance. The maximum  
9 from the federal government is \$250,000 for a  
10 residential property; \$500,000 for a commercial  
11 property. Not nearly enough to really cover a true  
12 peril.

13 So what will happen in the future is that  
14 banks will require people that are in high risk  
15 areas to carry more than the federal government  
16 currently supplies at the \$250,000 level and that's  
17 when you start getting into the excess flood  
18 insurance which gets to be very, very expensive.

19 Other congressional acts that will take place  
20 in January of 2017 will require that all flood  
21 insurance be escrowed if you have a mortgage, which  
22 now increases the cost of an individual who has to  
23 escrow their taxes, make their mortgage payment,  
24 pay wind storm and now flood insurance which could  
25 get very, very expensive.

1           What happens is that areas will become  
2           uninsurable. The insurance industry is going to be  
3           end up re-assessing this. The --

4           I don't know if you know what re-insurance is.

5           Re-insurance is where the insurance companies  
6           go to buy their insurance. And, the re-insurance  
7           industry has thrown out all of their climate models  
8           and are re-assessing how much insurance is going to  
9           cost over the next, you know, fifty to a hundred  
10          years.

11          I think we'll see insurance change in South  
12          Florida. It will be a little bit more like  
13          California where you'll have higher deductibles and  
14          you'll have capped insurance. So if you have a,  
15          you know, \$1,000,000 piece of property. You might  
16          only be able to get \$500,000 in insurance.

17          The problem that that creates is it goes back  
18          to the requirements of the federal government on  
19          securitizing mortgages. You have to show the  
20          ability to insure the entire property, if it's at  
21          risk, for flood insurance and, therefore, you will  
22          be under-insured and not eligible for a mortgage.

23          Those will have severe economic impacts to our  
24          community. That will also affect taxation. So you  
25          will have a situation where your property values,

1 actually, could be going down and your taxes going  
2 up, which is not the way the system is currently  
3 designed to work.

4 You could have a maximum three percent  
5 increase if you're homesteaded, per year. But,  
6 usually, it's based upon -- you see a rise like we  
7 had in the last two years where we have needed  
8 funds for the community although we haven't had a  
9 tax increase. But, you have property values  
10 increasing.

11 So now, you could have, potentially, property  
12 values decreasing and get significant tax raises  
13 which, obviously, makes a lot of people feel very  
14 uncomfortable about whether they should continue to  
15 own a home. That creates foreclosure issues and so  
16 on.

17 So these issues are, kind of, like the perfect  
18 storm that's coming over the next ten or fifteen  
19 years because the Federal Flood Insurance Program  
20 has to adapt and it, probably, will over the course  
21 of the next, maybe, five years where you'll see  
22 increases and then, eventually, phased out.

23 Also, the Federal Flood Insurance Program is  
24 designed to do what it's not supposed to do which  
25 is it encourages you to develop in high risk areas

1 because the insurance is so low at its cost.

2 And finally, Congress is realizing that and  
3 they're starting to react to that -- that they  
4 shouldn't provide insurance at low cost to high  
5 risk areas.

6 What that means for South Florida and our  
7 community, especially Miami and Miami Beach, is  
8 insurance will go way up. It will skyrocket.

9 So the balance is that if you can't buy  
10 insurance -- you can't get a mortgage, the banks  
11 can't lend money, then they have a cash issue and  
12 it impacts our economy here in South Florida.

13 There are some studies that I've read that  
14 also say by 2050 our two main tax -- main revenue  
15 stream which is tourism and property taxes could go  
16 down by as much as thirty percent.

17 If that happens we have a real crisis.

18 So, I think the committee needs to discuss  
19 what can we do to deal with the insurance industry.

20 We were very lucky, after Andrew, that --  
21 while many people were against it we did adopt the  
22 -- at the time it was the South Florida Building  
23 Code and now the Florida Building Code -- the many  
24 changes and that kept insurance at bay. It did go  
25 up. But, it didn't go up like it could have or

1           like it's done in the northeast after Sandy.

2                     So if we adapt new policies and we have -- you  
3 know, showing that we're lowering insurance  
4 company's risks that could keep insurance low and  
5 forestall the issues of the impact to banks and,  
6 ultimately, taxation.

7                     In some states, Illinois being the current  
8 one, insurance companies are actually firing back  
9 in a very unusual piece of litigation and it's  
10 gaining momentum.

11                    Although the case, I believe, was, ultimately,  
12 thrown out at the appeal level, the insurance  
13 companies are actually suing cities and states for  
14 saying they're not doing enough to stop their  
15 insureds from having such high risk to floods.

16                    It's not sea level rise in the midwest area.  
17 It's flooding. And, they filed a lawsuit saying  
18 that because they're being exposed to more claims  
19 and putting their insureds at risk, the State is  
20 not acting pursuant to its -- you know,  
21 constitutional duties.

22                    It will be very interesting to see -- as a  
23 lawyer, to see whether or not that kind of case law  
24 continues to develop if people will bring lawsuits  
25 against cities or counties and states for not doing

1 enough when they know there's a known risk.

2 The risk associated for Miami is, obviously,  
3 great because of our geology being -- you know  
4 being limestone and the water rising from  
5 underneath. We need to act a lot quicker.

6 The other problem that it creates is if our  
7 economy starts to turn and people are paying so  
8 much money at whatever level you're at to live in a  
9 home or buy a home that creates less tax dollars  
10 for the future to create solutions to deal with sea  
11 level rise and flooding or provide, you know, the  
12 things that you believe that we need for emergency  
13 services because you'll have less tax dollars.

14 So these are real events that are actually  
15 already shaping -- It's something that I want --  
16 that we will, as a committee, try to keep our eye  
17 on, is what the re-insurance industry is doing and  
18 I hope to invite a speaker from Swiss  
19 (indiscernible) in the upcoming months to come  
20 speak to us about what they're doing and what they  
21 see and how they're passing along these risks or  
22 expenses to the insurance companies who insure us  
23 or insure our homes.

24 So, I'm open for any questions that anybody  
25 has and then, you know, I think that, maybe, we can



1 make a suggestion as to how we may want to combat  
2 this issue in the future, which kind of dovetails  
3 into Reinaldo is going to be talking about  
4 concerning building codes and zoning.

5 Does anybody have any questions?

6 MR. A. GOMEZ: A quick question on the point

7 --

8 CHAIR PATHMAN: Would you just say your name  
9 again, please?

10 MR. A. GOMEZ: Albert Gomez.

11 CHAIR PATHMAN: Okay.

12 MR. A. GOMEZ: A question on the point you  
13 just made.

14 You're going to be bringing some kind of  
15 subject matter experts on the points -- that pick  
16 up that gave us.

17 I guess there are action items and most of the  
18 people here are, probably, passionate about this so  
19 they don't want to just pop in and never come back.  
20 They probably want to be engaged.

21 So, maybe, action items of what we're  
22 addressing.

23 There's a lot of subject matter experts,  
24 probably, in third person here or people have  
25 access to that they could bring value to this

1 committee.

2 Should we be able to send a list to Ajani of  
3 available people to speak at this sub -- at this  
4 committee?

5 CHAIR PATHMAN: Yes. One of the things -- A  
6 quick segue. We -- I put together a short list  
7 that we'll discuss with the committee tonight of  
8 just people we want to bring in over a -- We only  
9 meet once a month. So, we can't just pile it up  
10 with speakers. But, sometimes we may have more  
11 than one.

12 And, certainly, anybody here who has any  
13 suggestions of someone we will evaluate it as a  
14 committee as to who we would want to bring in to be  
15 informative and, you know, ultimately, our goal is  
16 to come up with solutions and ideas to try to pass  
17 along to the administration and the commission.

18 We have to work on our mission statement.  
19 This is only our second meeting. So we're still  
20 getting our feet wet, pardon the pun.

21 But, we are -- You know the idea is to be  
22 almost, initially, like a think tank.

23 MR. A. GOMEZ: Right.

24 CHAIR PATHMAN: Come up with all of these  
25 ideas. Get the issue out in public.

1           A number of us who are on the committee  
2 already serve on other committees that are dealing  
3 with this issue.

4           Reinaldo, the other night, head of the AIA  
5 sub-committee on this, held a forum which I  
6 appeared on the panel, which was very well  
7 attended, over a hundred people or many people from  
8 the industry and from the community.

9           And, this week, Friday, they have the climate  
10 -- the Gore -- What is it? -- the Climate  
11 Resiliency or Reality Project; which, maybe Ajani  
12 you could speak on before the end of the night.  
13 It's really interesting what's going on with that.

14           But yes, we would appreciate having, you know  
15 input from those of you who are here from the  
16 public and, certainly, giving us any names of  
17 people you'd like to see at our future committee  
18 meetings.

19           Anybody else have any questions? Yes.

20           MR. FRIAR: My name is Dion Friar.

21           Just to jump on that. I think it would be  
22 awesome if there's a way to get this on the  
23 website; because, I know a lot of people are  
24 looking for resources and to have these, kind of,  
25 validated by the city or the by the city committee

1 would be useful.

2 I mean I feel like other people are interested  
3 in this. There are, like, a million projects or,  
4 you know, like, a thousand meetings about sea level  
5 rise in Miami.

6 But, this committee has some authority that  
7 could influence policy and also be an educative  
8 resource.

9 So, that would be awesome to --

10 MR. GOMEZ: Yeah. I think what we're finding  
11 also is that there are many fountains in this  
12 community of information. Right?

13 There's now the FIU (Florida International  
14 University) Sea Level Rise Solution Center.  
15 There's -- I mean there's so many fountains.  
16 Right?

17 So this could be one of the many fountains and  
18 we just have to, sort of, synthesize this. There  
19 are going to be a lot of redundancy. But, we have  
20 a lot of churches, a lot of synagogues, you know.  
21 So religion -- Not that this is a religion; but,  
22 again, there is so much learning to do and so many  
23 experts to listen to so I think should be a  
24 fountain that with the website, hopefully, we  
25 collect this data and, kind of, filter it into

1           actionable items. Right?

2                   VICE CHAIR CALE: And, I would also just be  
3           curious to hear some examples of specific places  
4           like you had mentioned where there are cities and  
5           counties that are being sued already.

6                   I'd just be curious to -- From the perspective  
7           of looking at other cases, if you could mention a  
8           couple of examples of places you know where that's  
9           already happened.

10                   CHAIR PATHMAN: Well, Chicago is one. And  
11           then, there's -- I forget the name of the town in  
12           Alaska. They are on the northern tip of the State  
13           of Alaska and it's actually an island that is  
14           reducing its land mass every year, significantly;  
15           and they projected in twenty years the island won't  
16           exist anymore and they are requesting, you know,  
17           that the State do something because there are a  
18           number of native Americans who live there and  
19           number of fishing communities and so on and, you  
20           know, they don't know where to go. They don't want  
21           to be wiped out.

22                   So, that's an issue that's happening there.

23                   And, I've been trying to follow, you know, as  
24           much to see if other states or insurance companies  
25           are picking it up.

1           One thing I'd like to see the committee do or  
2           recommend is, you know, maybe to staff, is to get  
3           us to have a motion that I think I'd like to  
4           structure tonight to get us as much information as  
5           possible as to where our insurance is going in  
6           terms of cost. What are the thing that the city  
7           can provide us the information on insurance? And,  
8           what can the city do or suggest that should be  
9           undertaken with regards to trying to keep those  
10          insurance cost low? Because, that's going to be  
11          the first real big problem for South Florida; is  
12          going to be insurance.

13                 MR. RUPERT: I could actually -- If you're  
14                 interested I could actually speak to the lawsuit.

15                 CHAIR PATHMAN: Could you just put your name  
16                 on the record, please?

17                 MR. RUPERT: Yeah. My names is Thomas Rupert  
18                 with Florida Sea Grant. I'm an attorney and  
19                 coastal and planning specialist. And, in the  
20                 lawsuit of Farmer's Insurance in Chicago, they sued  
21                 about a hundred local governments. And, one of the  
22                 many theories that they used is what you indicated,  
23                 that the municipalities and local governments  
24                 already had extensive studies indicating the  
25                 change, rainfall patterns due to sea level rise and

1 the claim was that despite that information they  
2 hadn't modified their drainage systems to address  
3 the changes that they knew were occurring.

4 Therefore, they were -- the municipalities and  
5 local governments were liable for the additional  
6 flooding that then cost the insurance companies.  
7 It's a subrogation case.

8 It never made action, made it to court. They  
9 had filed -- It was filed for just a couple of  
10 weeks or, maybe, at most, a couple of months before  
11 they dismissed it voluntarily.

12 And they never really, I don't think, ever  
13 attempted to go through with it. But, they got a  
14 lot of publicity with it and that's what they were  
15 really after. The insurance companies want people  
16 who deal with this issue.

17 UNKNOWN SPEAKER: I e-mailed it to Ajani.

18 MR. RUPERT: Okay. Sure.

19 CHAIR PATHMAN: You had a question? Just,  
20 again, your name?

21 MR. LEMMERMAN: Yeah. Brian Lemmerman, Colony  
22 One.

23 I was just thinking about, you know, keeping  
24 the cost of insurance down.

25 If we take a look at these flood maps,

1 basically, everything that was built after the  
2 1930's is in low bands. We've expanded outward  
3 away from the coastal ridge and so all of those  
4 area become inundated in due time. So, we're  
5 looking at the majority of the land area being,  
6 essentially, uninsurable and just segue into the  
7 next section we're probably going to talk about,  
8 building codes.

9 Really, the only solution that I see and that  
10 I've heard other talk about is raising the ground  
11 floor of all of our future buildings and that's a  
12 building code change.

13 And then, we get into, okay, well then, what's  
14 our infrastructure going to be like?

15 We're not -- We're not going to be walking and  
16 driving around the way that we used to. It  
17 becomes, sort of, like a boat city.

18 And then, architects like to get creative  
19 with, well, what's our lifestyle going to be like  
20 or if you believe in going to Rome to do that and  
21 then what's the deterioration or the degradation of  
22 these neighborhoods going to end up being.

23 But, I think in terms of reducing the  
24 insurance costs we're talking about altering the  
25 building code and changing the way that we live all



1 together except for, maybe, within the urban core;  
2 we got Downtown, Overtown and Coconut Grove basin,  
3 like the highest areas within this area.

4 If you take a look, even at the ten foot map,  
5 you're basically left with the Florida Keys. And  
6 so, then, we have to talk about what that's going  
7 to be like.

8 The barrier islands are gone and so you are at  
9 a huge risk of not just regular inundation from the  
10 tides; but now, all of a sudden, storm surge makes  
11 you very vulnerable.

12 There's no mangroves. There's no barrier  
13 islands to protect you. So, it's even arguable to  
14 say, well, the whole downtown area becomes  
15 uninsurable in terms of flooding unless we then  
16 raise -- And then, we end up with the city that's  
17 completely raised up. And, is the cost of doing  
18 that really worth it?

19 We have to ask ourselves that and that's  
20 something that I don't think we (indiscernible).

21 CHAIR PATHMAN: I think eventually it will  
22 also be like a triage; what is worth saving, what's  
23 not.

24 MR. LEMMERMAN: Yeah.

25 CHAIR PATHMAN: Will the cost be -- But, I

1 think long before, you know, we get to the point in  
2 Harold's -- Harold Walmus's pictures there is that  
3 the --

4 And, again, before the water even gets here,  
5 the cost is going to be exorbitant in the next ten  
6 or fifteen years.

7 I mean you could see, in the -- let's say  
8 Miami Beach, for instance, in the Flamingo Park  
9 Historic District, which is, you know, filled with  
10 many smaller apartment buildings and homes that are  
11 all historic, currently someone might be paying for  
12 a ten-unit apartment building -- the owner of the  
13 building might be paying six or seven or ten  
14 thousand dollars a year for flood insurance through  
15 FEMA, through the National Flood Insurance Program.

16 But, in the future that cost could go up to  
17 forty or fifty thousand dollars in the not too  
18 distance future. Who is going to live there? How  
19 are they going to pass those costs on? Who is  
20 going to save that building?

21 That's something that I think that, you know,  
22 this committee needs to explore.

23 How do we, you know, deal with that now? How  
24 do we combat the issues of the ever impending  
25 insurance?

1 Insurance companies are the richest companies  
2 in the world and they're going to make their money.  
3 You know, they're going to find a way to make money  
4 and they're already changing their thinking and  
5 that's going to come and that's going to happen  
6 very soon.

7 So I'd like to see -- I'd like to make a  
8 motion to the committee that we further study the  
9 impacts of insurance and get data from the city, as  
10 much as we can; and, any outside source.

11 You volunteered. I forget your name again.

12 MR. RUPERT: Thomas Rupert.

13 CHAIR PATHMAN: Thomas Rupert? Even though  
14 he's a Gator I'll accept it.

15 VICE CHAIR CALE: Go Gators.

16 CHAIR PATHMAN: Go Gators. Right? That we  
17 get as much information as possible to then advise  
18 the administration about what I think is the one  
19 first perils to say we'll face and that is the cost  
20 of insurance and how that's going to affect  
21 everything else in the economy. That's a real  
22 economy driver in terms of how it will effect  
23 banking and taxation in the future.

24 So the motion being that we collect as much  
25 information from the administration and outside

1 sources to analyze impending increases in insurance  
2 over the next ten years.

3 UNKNOWN SPEAKER: Have they set the deadline  
4 for the FEMA re-dis -- the re-mapping. I know it's  
5 2016. But, they didn't --

6 CHAIR PATHMAN: Yeah.

7 UNKNOWN SPEAKER: I don't know if there's an  
8 actual --

9 CHAIR PATHMAN: You know, it's kind of a  
10 moving target. They keep --

11 MR. LEMMERMAN: They're pushing it.

12 CHAIR PATHMAN: -- pushing it back. But, that  
13 is one of the mandates of the act, of the  
14 legislation. So, we'll see.

15 Right now, that's the current requirement.

16 Yes?

17 MS. NELSON: Is this the --

18 CHAIR PATHMAN: Your name?

19 MS. NELSON: Joyce Nelson. Is this going to  
20 include wind storm as well as flood? No?

21 CHAIR PATHMAN: No. Two separate issues.

22 MS. NELSON: Yeah, I know.

23 CHAIR PATHMAN: Okay. No, this is just -- You  
24 know, we are very accustomed to having low cost  
25 flood insurance that we hardly ever make a claim

1 on.

2 That's going to change dramatically.

3 And the insurance companies, by the way, who  
4 give you your wind storm will also re-assess when  
5 they commit, if we did have a hurricane.

6 In the past they've, kind of, come in. They  
7 see the damage. They cut you a check. They don't  
8 even differentiate, usually, for the flood.

9 MS. NELSON: It's totally changed.

10 CHAIR PATHMAN: Yeah. That's totally changed  
11 now. They're going to deny as much coverage as  
12 possible and put that over --

13 MS. NELSON: They do.

14 CHAIR PATHMAN: -- on the flood side and then  
15 you're going to look at your policy and say, well,  
16 I only have a maximum of \$250,000. I've got  
17 \$500,000 worth of damage. Who is going to cover  
18 that \$250,000, you know, gap?

19 And, that's something that, you know,  
20 everybody in the community is going to be facing  
21 unless you have excess insurance.

22 VICE CHAIR CALE: Plus, you have to pay for  
23 other people if they run out of money.

24 CHAIR PATHMAN: Well, the program -- you know,  
25 we pay thirty-seven percent of the National Flood

1 Insurance Program. We pay thirty-seven percent of  
2 the money they collect every year.

3 So, it's -- You know, we -- At some point, the  
4 critical mass will be when there are a lot of  
5 claims; whether it's a hurricane or it's because  
6 of, you know, constant flooding because of rising  
7 tide. There's not going to be enough money. And,  
8 if you don't have excess insurance at this point  
9 you're not going to have coverage. And, if you  
10 don't have excess insurance you're not going to be  
11 able to get a mortgage, if you mortgage your  
12 property.

13 VICE CHAIR CALE: Exactly.

14 CHAIR PATHMAN: So that was my motion.  
15 Anybody second it?

16 VICE CHAIR CALE: I would like to second it.

17 CHAIR PATHMAN: Okay. All those in favor say  
18 aye?

19 (Thereupon, responses were in the affirmative.)

20 CHAIR PATHMAN: All of those opposed?

21 (Thereupon, no responses were heard.)

22 CHAIR PATHMAN: All those abstaining?

23 (Thereupon, no responses were heard.)

24 CHAIR PATHMAN: None? Seeing none, the motion  
25 passes.

1           Okay. The next item is building, planning and  
2 zoning and Reinaldo Borges, one of our very  
3 esteemed architects in the community and also the  
4 head of the Task Force at the AIA will make a short  
5 presentation.

6           MR. BORGES: Yes. So, for those of you that  
7 don't about the AIA Sea Level Rise Task Force, it's  
8 the architects here. The American Institute of  
9 Architects has an association and I decided to lead  
10 that group with the concern of sea level rise as it  
11 affects what we do as architects every day.

12           And that comes out of the fact that we do a  
13 lot of resiliency, a lot of sustainability design.

14           But, you know, it hits me hard that, you know,  
15 we could have a very sustainable building,  
16 certified by the U.S. Green Building Council. But,  
17 if we don't think about how the building is going  
18 to be affected by rising tides and all of the other  
19 factors associated with climate change then, you  
20 know, I think it's, sort of, a false promise, if  
21 you will.

22           So, we had a fantastic event the other night  
23 where we talked about a lot of these points and  
24 Wayne presented his case on economic risk and  
25 insurability.

1           And, honestly, I'm an architect, so I got  
2 really bored about talking about insurance.

3           And, what I think about is what do I do  
4 tomorrow with my work that will protect the value  
5 of my building and the asset that I'm creating for  
6 my clients so that my client doesn't have to worry  
7 about flood insurance?

8           So, you know, we were talking about what  
9 happened in Katrina and one of the things that  
10 shocks me, as an architect/planner and perhaps  
11 futurist, is the fact that we could design a very  
12 resilient community, like, tomorrow. We should be  
13 doing that right now. Okay?

14           But, we bet on insurance, you know, to protect  
15 us and to help us pay for damages that we could  
16 foresee, that we could design around, so that we  
17 have a more resilient community so after these  
18 events that are catastrophic the community is up  
19 and running.

20           I mean I don't know if any you remember what  
21 happened with Wilma, on Brickell Avenue, for  
22 example, where I have my office, all of the glazing  
23 that we lost, the lost time and revenue of all of  
24 these companies that were out of service.

25           So, I'm into, sort of, designing a future that



1 is more resilient and, hopefully, you know, the  
2 insurance companies will appreciate that; because,  
3 you know, once we get to a point where we're not  
4 insurable we really don't have much of a community,  
5 you know.

6 So, what I wanted to share with you -- and  
7 this is a long issue, so I'm just going to be as  
8 brief as I could be; because, you know, the other  
9 thing that I'll tell you about Mr. Walmus  
10 (phonetic), who creates these things, is that, you  
11 know -- you know, when you meet him and you greet  
12 him and you realize the intelligence that he brings  
13 to his modeling and to the future of sea level rise  
14 it's fantastic. But then, you kind of what to go  
15 and have a drink and chill out because it gets  
16 really depressing, you know.

17 But, what we need to consider is the fact  
18 that, you know, you pointed out to this, you know,  
19 2125. You know, I don't think we'll be around.  
20 But, the question becomes -- and it's an important  
21 question for architects and planners and the  
22 building code and the planning department is what  
23 are we planning for into the future?

24 You know, what kind of city are we going to  
25 have through time.

1 I mean, I'm interested in that.

2 We are, right now, building a city, probably,  
3 over 20 billion dollars of investment and new  
4 construction right now. You know, everybody is  
5 excited. You know, we recently had events with  
6 over 500 people in the room about real estate. I  
7 mean, I Chair a Real Estate Council Committee at  
8 the Chamber and it's always fantastic to see the  
9 enthusiasm and this is feeding a lot of people and  
10 people are excited about building a new city. The  
11 Mayor is excited about what is happening.  
12 Everybody is excited about what's happening.

13 It generates revenue, value, assets.

14 My concern is what do I do with my buildings  
15 tomorrow and having with Wayne and Commissioner  
16 Keller (phonetic) one night, Commissioner Soto said  
17 -- and this is a commissioner of the county that is  
18 so enthusiastic and so intelligent about this --  
19 and she say, okay, give me solutions. And, I'm  
20 like, okay, the first solution I'll tell you is  
21 that we've got to modify the code. We've got to  
22 modify the standards that architects design to,  
23 that the engineers design to and it's an emergency  
24 guys. Okay?

25 We don't have the building official here. We

1 don't have the building -- the planning and zoning  
2 director here. They're all friends of mine. These  
3 are all good people. But, some of them, actually  
4 have confessed to me -- and I won't tell you who --  
5 that, hey, you know, I'm like kind of skeptical  
6 that this is really happening and what kind of  
7 actions could I take as a leader in what I do?

8 And, I think, you know, we need to talk to  
9 these folks, you know; because, our future is in  
10 their hands in many ways because the Florida Code  
11 -- the Florida Building Code -- to modify the  
12 Florida Building Code it takes a committees that's  
13 appointed by the Governor and how may have you have  
14 found out (indiscernible).

15 VICE CHAIR CALE: Oh, wonderful.

16 MR. BORGES: You know, (indiscernible) fears  
17 about, you know, sea level rising and climate  
18 change.

19 VICE CHAIR CALE: Yes.

20 MR. BORGES: So, you know, I really don't  
21 trust that Tallahassee has a solution.

22 You know, we have to really be very pro-active  
23 and take a lot of leadership here in South Florida  
24 with intelligence, with passion.

25 You know, we don't want to freak anybody out.

1 This is really not a tsunami, you know. This is  
2 not what happened in Japan. But, it's a very slow  
3 process and the challenges that we are reactive --  
4 We are not really a pro-active society when it  
5 comes to planning.

6 You know, I mean -- I mean we're starting now  
7 to have resiliency and sustainability. You know,  
8 like, right now, Miami 21 and these zoning codes  
9 requires that most of the building -- the large  
10 scale buildings that I do are going to be  
11 sustainable and certified. So, that's fantastic.

12 I'm less concerned about sustainability now  
13 and I'm very concerned about resiliency because  
14 they are two different issues and resiliency is a  
15 tough one right now; because it's not --

16 CHAIR PATHMAN: Excuse me, Reinaldo. Just one  
17 second. I just want to let you know that Hal  
18 Walms was just calling me so someone must have  
19 texted him with your comment while we were here.

20 MR. BORGES: Was it a good comment or --

21 CHAIR PATHMAN: He was calling in. No, I'm  
22 joking.

23 MR. BORGES: -- because, you know, we --

24 CHAIR PATHMAN: He was just calling --  
25 (Thereupon, parties were speaking over each other.)

1 Could not be transcribed.)

2 CHAIR PATHMAN: He was just calling as you  
3 were --

4 VICE CHAIR CALE: His ears were --

5 CHAIR PATHMAN: His ears were burning.

6 MR. BORGES: One of the things -- You know,  
7 one of the things that I do a lot and Wayne does a  
8 lot and others do a lot is advocacy and advocacy  
9 works at different levels and sometimes, you know,  
10 we're trying to get together with political leaders  
11 and talk to them and corporate leaders and leaders  
12 of this community, you know. Most of my clients  
13 are city builders, you know, and these are really  
14 good people. But, they're not in the conversation,  
15 you know, and that's the challenge.

16 So, when you see these images -- And I, kind  
17 of, wanted to walk you through a few images. What  
18 I think about is how these buildings are meeting  
19 the streets and how we understand the map of the  
20 City of Miami. Not every street in the City of  
21 Miami is going to be flooded in the next fifty  
22 years. But, you know, some will be, you know. And  
23 we've already seen sunny day flooding happening in  
24 areas that have highly valuable assets.

25 So, as an architect/designer, you know, my

1 thinking is how do I modify the way the building  
2 meets the street and how do we need to modify the  
3 zoning code and the building code to allow the  
4 designers to do that automatically without asking  
5 for variances, without having to ask our clients to  
6 allow us to do it?

7 Right now, if I wanted to bring more  
8 resiliency into any of my buildings I have to take  
9 actions that go beyond what the building codes and  
10 zoning codes require. And, in fact, sometimes I  
11 may even have to ask for a variance to the zoning  
12 code and my clients says, well, that's like a  
13 90-day process, you know. How am I going to pay  
14 for that, you know.

15 So, you know -- And I've already -- Before I  
16 was a member of this committee and affected by the  
17 sunshine conversations, I've had lunch with  
18 Francisco Garcia, who is a good friend, and I think  
19 a great planner. He was involved in the writing of  
20 Miami 21, which is -- For those of you that don't  
21 know about Miami 21 it's a foreign based code.  
22 It's the first time that an American city with this  
23 complexity actually gets adapted to a foreign based  
24 code.

25 Originally, of course, I voiced my concerns

1 about it because I don't think we needed a brand  
2 new code in order to build a more resilient and  
3 more sustainable city. But, we got it and that's  
4 what we're working with right now.

5 Now, for example, to give you an idea, this  
6 building here is T68 and right now anything that I  
7 do in the basement parking configuration, the City  
8 of Miami -- my client gets additional building area  
9 above grade.

10 So, guess what? I'm doing more basement  
11 parking right now in the City of Miami than ever  
12 before; because, the financial formula of the  
13 amount of square footage that I have to put below  
14 grade and allow for more saleable -- more  
15 productive economic assets above grade, it makes  
16 sense.

17 So, right now, a lot of basement parking. I'm  
18 think, hmmm, this is not very intuitive. But, you  
19 know what? The code promotes it and it's an  
20 economic formula. Buildings are economic formulas.  
21 That's the way the American city was developed. It  
22 has to do with who had the vision, the assets, the  
23 property, the land use allowed and the vision to  
24 generate something. That's the way the American  
25 city has been structured.

1           So a building like this with the basement  
2 parking, at some point, we're going to lose this  
3 asset. At some point that's going to be a concern.  
4 Like Wayne was saying, the water here is also a  
5 water pressure that we get -- you know, very, very  
6 porous -- not very good insulated sub-strata for  
7 the water.

8           So, if you notice in basement parking along  
9 Brickell that have been there for many, many years,  
10 you could see that the water really starts to come  
11 through the cracks of slabs and concrete because  
12 concrete does expand and crack and so on and so  
13 forth. So it's a long term issue.

14           Immediately, these people will never feel the  
15 effects of sea level rise for perhaps the first,  
16 you know, fifteen/twenty years of habitating these  
17 building.

18           My concern is at a certain point, you know, if  
19 you start losing components of buildings that's not  
20 very sustainable. If we're losing five or ten or  
21 fifteen percent of a building into the future  
22 that's not very sustainable.

23           You know, we're having to -- We're going to  
24 have to abandon portions of buildings like they've  
25 had to do in New York and in other places. So



1 that's an issue.

2 So one of the ideas that I came up with at the  
3 AIA Sea Level Rise Task Force was the idea of  
4 coming up with a resiliency certification process.  
5 Okay? And this will stimulate the developers and  
6 the city builders to build more resilient if they  
7 get some kind of certification that allows them to  
8 get better insurance rates. Okay? It allows them  
9 to have a more valuable asset through time. The  
10 could, probably, exchange this asset to future  
11 investors with this certificate.

12 And, this certification could be to whatever  
13 level they want to certify it to. It could be to  
14 three feet. It could be to six feet. I mean  
15 whatever they want to, you know, certify it  
16 towards.

17 And, I'm talking to the USGBC (U.S. Green  
18 Building Council) to see if they could incorporate  
19 it into their certification process for  
20 sustainability. So now the USGBC starts to  
21 introduce resiliency into their charts and into  
22 their evaluation of buildings.

23 Remember, the building assets that we have in  
24 these cities are the things that are most at risk.  
25 Okay? Then we have bridges and tunnels and other

1 aspects of our infrastructure.

2 So yes, the storm water will be improved if  
3 you talk to Mayor Gimenez, you know. He's talking  
4 now about his re-election. We're building whatever  
5 -- twenty something billion dollars of improved or  
6 adapted infrastructure.

7 When you talk to water and sewer managers they  
8 tell you, well, what is it? The only science that  
9 is affecting the decision-making at county hall  
10 right now is political science. Okay?

11 So that means that, at the end of the day,  
12 what we're putting into our infrastructure in the  
13 future may not have the capacity, you know, for  
14 these sort of torrential rains that we're  
15 experiencing, the kind of abundance of water that  
16 we get.

17 So all of this affects the way that I design  
18 these buildings and I wanted to show you a few  
19 things.

20 I mean this is a T68 building.

21 CHAIR PATHMAN: Reinaldo a couple of more  
22 minutes. Okay? If we can move along.

23 MR. BORGES: Yes. This is much more important  
24 than insurance because this will allow us to get  
25 flood insurance.

1 CHAIR PATHMAN: We won't have any buildings to  
2 build if we don't have insurance.

3 MR. BORGES: Well, if the building is adapted,  
4 you know, it'll suffer much less damage.

5 So, for example, this is a 56-story tower that  
6 we did on Brickell and if I were to look at the way  
7 that this building meets the street and the way  
8 that zoning allows me, right now, with Miami 21 to  
9 meet the street -- You know, for example, if it's  
10 all residential I'm allowed fourteen feet. If I've  
11 got commercial I could do up to twenty-four feet on  
12 the ground level. But, right now, nobody is  
13 thinking that at a certain point in the life of our  
14 community we may need to abandon the ground floors  
15 of buildings.

16 So what do we do then? Well, that means that  
17 the second floor becomes our first floor. So,  
18 maybe, we need to look into the future and say,  
19 hey, maybe, the second floor needs to be designed  
20 so that eventually it could become the ground  
21 floor.

22 So, you know, how much of that do we want to  
23 do? How much life do we want to give buildings?  
24 That's a big question; because, we really don't  
25 know how bad this is going to get.

1           You know, as a planner, as an architect, you  
2           sort of ask the scientists and the other night I  
3           was talking to someone that understand the way the  
4           ice is really behaving and it's so difficult right  
5           now to really tell us how fast this is really going  
6           to happen. You know, these are all projections.

7           So somebody says, well, you know, if it gets  
8           like that forget about it. Who is going to  
9           habitate this area?

10          So I'm an optimist, you know. I think it'll  
11          not be as bad, perhaps. But, you know, we need to  
12          start taking actions now. And, really, that has to  
13          do with adapting the code. And adapting the code  
14          will also affect the way that we're putting  
15          generators into buildings right now, the type of  
16          generators that I'm asked to put into building  
17          right now and where I place those components.

18          So part of the certification process is to  
19          make sure that all the components that make the  
20          building breathe and live are up high enough so  
21          that they won't be damaged. You know, we saw that  
22          during Sandy that a lot of vital organs of  
23          buildings were, you know, affected and then,  
24          suddenly, you see these buildings and what happened  
25          with all of the organs sitting on the sidewalk is

1 that they made space up above in higher areas to  
2 adapt those buildings and modify them.

3 So I think -- You know, code modification, to  
4 me, is primary. There is so much else that we have  
5 to cover about that. It's so difficult already to  
6 modify the code. So, to me, the effort has to be  
7 in code modification. Miami Beach is leading the  
8 way. They've got about seven components of their  
9 code that they're trying to modify right now and  
10 they're not waiting for Tallahassee and they're not  
11 waiting for FEMA. They're actually going to have  
12 more stringent requirements for where we put our  
13 base flood elevation for our buildings and how we  
14 adapt our building by raising our buildings and, of  
15 course, they're also raising the streets, you know.  
16 But, right now, I'm not concerned about streets  
17 because that's a public works item.

18 And as I close, because I'm sure waiting for  
19 someone to tell me that I've got about two seconds  
20 -- It's about integrating public works, planning  
21 and zoning and the building code and, of course,  
22 life safety, you know, into what we do. Okay?  
23 That's sort of -- There needs to be a committee --  
24 a very robust, powerful committee, that starts to  
25 look at that at the county level and we're looking

1 forward to Jim, hopefully, to lead the way in that  
2 and put those things together.

3 If the county leads -- You know, the county  
4 really has a lot of firepower and municipalities  
5 like the City of Miami and Miami Beach, you know,  
6 tag along it goes a long way. So, what you guys  
7 are doing with the application for the resiliency  
8 issue with the Rockefeller Foundation, I think  
9 ignites that collaboration already and we need to  
10 expand that collaboration, you know; because, this  
11 issue really cannot be like a series of little  
12 fountains working separately. I think the more  
13 holistic, the more integrated this whole effort  
14 could be between all of the emergency managers of  
15 Dade County and all of the architects and planners  
16 that really need to pay attention -- Because --

17 You know, we're all busy now doing what we do.  
18 Okay?

19 My concern is that when we're busy being busy  
20 and professionals we forget to innovate, we forget  
21 to give back to the community, we forget to look  
22 about the future of what's happening. So -- And  
23 then, we need storms to remind us, you know, that  
24 we live in a dangerous place.

25 CHAIR PATHMAN: Any questions?

1 MR. A. GOMEZ: There's a real important point  
2 that you just brought out.

3 CHAIR PATHMAN: Could you just put your name  
4 on the record?

5 MR. A. GOMEZ: Albert Gomez.

6 CHAIR PATHMAN: Thank you.

7 MR. A. GOMEZ: There's a real important point  
8 that you brought up and I'm glad that, Lily, you're  
9 here.

10 MS. BLONDET: Lillian.

11 MR. A. GOMEZ: Lillian. I'm sorry. Lillian  
12 Blondez, right?

13 MS. BLONDET: Uh-huh.

14 MR. A. GOMEZ: So I brought forth the  
15 Rockefeller Foundation Resilient Cities Initiative  
16 here to Miami and asked that all of the cities  
17 submit a grant a year and a half ago and I've held  
18 two resilience roundtables at FIU and we had  
19 interest by everybody.

20 Julie -- I mean the CEO -- Judy, the CEO of  
21 the Rockefeller Foundation called me personally,  
22 with my director, while he was up in New York and  
23 told me we are going to give you the million  
24 dollars. You are the finalist. We want you to  
25 have it. But, you have to submit together.

1           There's a shared risk equation here that we cannot  
2           avoid for us to give a million dollars to one city  
3           when the emergency management plan denotes that you  
4           have to work together in an emergency management  
5           scenario. You have to have a shared resilience  
6           submission.

7           Because we did not submit together and we  
8           tacked away from that in the final hour, we lost  
9           that to Jacksonville.

10          I'd hate for that to happen again.

11          CHAIR PATHMAN: Yeah.

12          MR. A. GOMEZ: And the fact that you're here  
13          and hearing it out loud is better.

14          That is why we lost the million dollars;  
15          because, we submitted individual grants -- the City  
16          of Miami, Miami Beach, and we broke down.

17          And I know Chuck Taylor was interested in  
18          doing it together. There was interest in the City  
19          of Miami as well. There were people in the City of  
20          Miami that wanted to do it together. But, it broke  
21          down and I don't -- You know, it's not about  
22          pointing fingers because that's the past. But,  
23          this is the present and we're about to re-submit  
24          and I hear the conversations about wanting to do it  
25          together the same as we had before and when it gets



1 down to the final hour, it's going to become an  
2 issue that has to either be, kind of, controlled or  
3 brought to the forefront as we have to submit  
4 together or we're not going to get the monies.

5 MR. GOMEZ: Well, it's -- I think that's --

6 MR. A. GOMEZ: So that's why -- It's a million  
7 dollars.

8 MR. GOMEZ: I can address it if you want?  
9 It's going to get submitted together.

10 CHAIR PATHMAN: Yeah.

11 MR. GOMEZ: There is no --

12 MS. BLONDET: -- back in the past the county  
13 was not allowed to submit.

14 MR. GOMEZ: Correct.

15 MS. BLONDET: This year we've got word that  
16 the county could be submitted. Because, when you  
17 look at the write-up counties are not allowed.

18 CHAIR PATHMAN: Right.

19 MS. BLONDET: And the same thing  
20 (indiscernible) with the Rockefeller --

21 MR. GOMEZ: Yeah. The biggest --

22 MS. BLONDET: -- (indiscernible) --

23 MR. GOMEZ: The biggest challenge to the  
24 community --

25 MR. A. GOMEZ: Right. It was -- The goal was

1 for the City of Miami and City of Miami Beach --

2 MS. BLONDET: Oh.

3 MR. A. GOMEZ: -- the last time.

4 MR. BORGES: In any major planning effort --  
5 This is like the most significant transformational,  
6 complex, planning issue that faces humanity all  
7 over the planet. Okay?

8 So, you always have integrated process and the  
9 community has to act as one and we know that in  
10 Miami and South Florida sometimes that's a  
11 challenge. But, it seems like this time it'll work  
12 and it'll be, I think, you know, sort of the first  
13 time that this collaboration will lead them to  
14 really take an action; because, this is only step  
15 one.

16 I mean the Rockefeller Foundation -- millions  
17 dollars, great; --

18 MR. A. GOMEZ: It's a million dollars. Yeah.

19 MR. BORGES: -- you know. But, we've got a  
20 bigger problem than that, you know.

21 MR. A. GOMEZ: Absolutely.

22 MR. BORGES: And all I'm saying is that, you  
23 know, we kind of have this conversation; multiply  
24 it and expand it with great intelligence, great  
25 sense of urgency, transparency. You know, all of

1 the things that are needed, really, to move this  
2 issue forward and this is a forum. So, thank you.

3 MR. A. GOMEZ: Yeah. I --

4 CHAIR PATHMAN: Any -- Wait. Any additional  
5 --

6 MS. TASHIRO: Can I say something?

7 CHAIR PATHMAN: -- questions? Yes?

8 MR. TASHIRO: So you spoke about  
9 (indiscernible) --

10 CHAIR PATHMAN: Can you put your name on the  
11 record?

12 MS. TASHIRO: Stephanie Tashiro. You spoke  
13 about, perhaps, having to abandon the ground floor  
14 of parking structures or even the first floor of  
15 some buildings.

16 So if those buildings experience either  
17 permanent flooding or cyclical flooding what would  
18 that do to the structural integrity of it -- high  
19 rises that --

20 MR. BORGES: Okay. So, I'm an insurance agent  
21 selling you an insurance policy for a big  
22 commercial billion dollar development in downtown  
23 Miami with two levels of basement parking.

24 MS. TASHIRO: Uh-huh?

25 MR. BORGES: And I'm looking at it -- And I'm

1 looking at it through time. You know, I may look  
2 at it short term. The short term building would  
3 have basement parking that's going to be affected  
4 by storm surge.

5 We've already modeled storm surge activity,  
6 especially up the Miami River and a Category 4, 5  
7 or 6 storm could really do significant storm --

8 MS. TASHIRO: Right.

9 MR. BORGES: -- surge damage in the city.

10 So when a basement garage gets flooded, you  
11 know -- It was like -- Remember the State of New  
12 York Governor, sort of, saying I can't believe  
13 that, you know, the tunnels flooded and that we  
14 didn't foresee this or that the subway flooded and  
15 -- I mean they could have foreseen it, you know.  
16 They could have modeled it. They could have seen  
17 it. They could have protected these infrastructure  
18 components.

19 So, right now, the concern is that because,  
20 you know, architects and planners right now are  
21 busy being busy. Developers are, you know, doing  
22 what they're doing, getting their loans, their  
23 financials and so on and the codes are not required  
24 -- We're building a new city that is underdesigned  
25 for some of the aspects of the future that are

1 coming to this community.

2 You know -- I mean, Wayne, sometimes says, you  
3 know, nothing is resilient. Well, not really;  
4 because, you know, the building envelope for these  
5 buildings is very resilient. You know, we have a  
6 building code that requires that the building  
7 envelope in residential buildings only; not, in  
8 office buildings -- Office buildings could still be  
9 designed with glass that will break and will make  
10 these buildings obsolete for a period of time as  
11 the glass gets replaced, you know, which is just  
12 unfortunate.

13 MS. TASHIRO: But, I understand the flooding  
14 and the wind risk. What I'm saying is if these  
15 buildings -- If you -- Let's say you did have to  
16 abandon the first floor of the building. Is that  
17 something that the building could withstand being  
18 in standing water for so long?

19 MR. BORGES: So it depends on how this --  
20 Okay. So -- So now we have concrete that is  
21 designed to be under water with a lot more  
22 integrity for longer periods of time. But, the  
23 building has to be designed with these properties,  
24 you know.

25 And right now, the concrete that we're using,

1 most of the time, is not the best technology that's  
2 available because it's not mandated.

3 So, one of the things that the building code  
4 could do is mandate that the way buildings lead  
5 into the ground -- Okay? -- all the components of  
6 that, the concrete, the reinforcements --

7 You know, like, right now, when I specify  
8 galvanized reinforcement or reinforcement that is  
9 treated, you know, to protect it from corrosion,  
10 usually, it's taken out of the job because it's not  
11 mandated by the code. It's optional.

12 MS. TASHIRO: Uh-huh.

13 MR. BORGES: So all of these things that are  
14 optional, actually, create a weakness in that  
15 aspect.

16 So, if you have a basement parking and the  
17 basement parking floods and you have major  
18 components of the building that will affect the way  
19 that this building performs it could be an issue.  
20 So every building has to be evaluated on a case by  
21 case basis.

22 Right now, in basement parking, we can only  
23 have parking. In basement areas we can have  
24 storage and parking. That's all that the code  
25 allows us to do. It still has life safety

1 components. It still has egress. It still has all  
2 of these components in the building.

3 But, what we've seen in New York, for example,  
4 is that they had generators -- Like in Wall Street,  
5 they had buildings that had generators and other  
6 components of pumps and things like that below the  
7 street level. So, when the storm surge came in or  
8 the flooding that Sandy brought on, you know,  
9 filled all of these basements and made these  
10 buildings obsolete in the center of the world -- in  
11 the financial world, you know.

12 So, these are all things that we see; Sandy  
13 being a great lesson. You know, I think Sandy, in  
14 many ways, was a gift; because, so many different  
15 workshops and design thinking exercises have taken  
16 place after that.

17 But, unfortunately, what you learn as an  
18 emergency manager is that we only learn, you know,  
19 when we have these experiences and then we tend to  
20 forget. You know, we get into memory loss when we  
21 experience these things and then, you know, I get  
22 concerned about that; because, we not building the  
23 right cities.

24 MS. TASHIRO: So, are they retrofitting the  
25 constructions methods available to, let's say,

1 build after these buildings that were built in the  
2 past and make their first floors and basement more  
3 flood proof --

4 MR. BORGES: So one of the ideas --

5 MS. TASHIRO: -- even though it's letting the  
6 water in. But, --

7 MR. BORGES: Yeah. So one of the ideas with  
8 the certification process is that you could certify  
9 existing buildings which means that you have to go  
10 back and do some kind of forensic work.

11 In some cases, it may be modifiable and  
12 adaptable so that you could certify certain  
13 buildings up to a certain level.

14 But, you know, like Florida Power and Light  
15 has really never been very concerned about where  
16 you put their vault, the electric vault in  
17 buildings, and I think more and more --

18 You know, they used to be relaxed about it.  
19 You know, the vault could flood. The vault could  
20 be under water. It's not a big deal.

21 But now, more and more, we see them being  
22 concerned about that.

23 But, we have a major concern. Florida Power  
24 and Light requires that they have to enter the  
25 vault 24/7 -- you know, 365 days a year and we need



1 to give them access.

2 So, if you put that vault in a more protected  
3 area, Florida Power and Light suddenly has a  
4 little, you know, fit -- you know, that they cannot  
5 get to their vault.

6 So, these are all complex issues and it's  
7 easier said than done, you know, to design into a  
8 world that is more resilient. You know, we need to  
9 have a resiliency checklist. It has to be  
10 codified. It has to be mandated by political  
11 leaderships that are policy makers and then, you  
12 know, architects and engineers could design into  
13 that, you know. Like Mariano Fernandez, the  
14 building official in the City of Miami Beach, right  
15 now, who is at the center of the storm over there,  
16 he says, you know, you could engineer and design  
17 into anything; but, you have to have the right  
18 standards. And, right now, we don't -- We have  
19 deficient standards to design to.

20 So that's my focus. Even though I believe in  
21 Everglades restoration and water quality issues and  
22 all of these things my focus as an architect is  
23 more about how we're building this new city.

24 MR. LEMMERMAN: I think -- Briane Lemmerman,  
25 with Colony One -- when Stephanie was more -- like

1 with existing buildings, to imagine we have salt  
2 water intrusion that becomes higher and higher.  
3 Right?

4 So, you have these reinforced concrete  
5 foundations that are exposed to salt water 24/7  
6 with the steel that is fairly low grade. It's not  
7 the highest quality stuff. It's not the latest  
8 technology.

9 Within a decade or less you start to have the  
10 steel corroding and then the concrete crumbles in  
11 these buildings and --

12 MR. BORGES: Well, see, the beauty is that  
13 right now we have the technology. So that concrete  
14 that's under water in salty water could be there  
15 for thousands of years -- Okay?

16 MR. LEMMERMAN: Okay.

17 MR. BORGES: -- if we do it right. Okay?

18 MR. LEMMERMAN: Right.

19 MR. BORGES: We have ways of waterproofing and  
20 isolating and protecting the lower portions of  
21 these buildings, you know. We have all of this  
22 technology.

23 MR. LEMMERMAN: Yeah.

24 MR. BORGES: The thing is that it's optional.

25 MR. LEMMERMAN: Exactly.

1 MR. BORGES: So there's something in my world  
2 is called value engineering.

3 MR. LEMMERMAN: Exactly.

4 MR. BORGES: You know, when they want to take  
5 a couple of million dollars off, the first thing  
6 that they do is they may remove some waterproofing,  
7 you know; --

8 MR. LEMMERMAN: Yeah.

9 MR. BORGES: -- because, you know, if you  
10 don't see it, you don't touch it. Nobody sees it.

11 So, again, you know, if you codify these  
12 things then you expand the life of these assets.  
13 The insurance companies, I think, are going to be  
14 open to that, as well, you know; because, they  
15 don't want catastrophic risk, you know.

16 And that's the kind of conversation I want to  
17 have with insurance and re-insurance people. Sort  
18 of, how do we build a more resilient, you know,  
19 urban environment.

20 MR. LEMMERMAN: Yeah.

21 CHAIR PATHMAN: I'm going to close the public  
22 comment.

23 Reinaldo, do you want to make any kind of  
24 motion that you -- or discussion that you want to  
25 have with panel members to see what action we

1 should take or -- And it doesn't have to be  
2 directly related to action to the commission; but,  
3 maybe, directly to the planning department or  
4 zoning, coming from this committee.

5 MR. BORGES: Well, I think if there's going to  
6 be the hiring of a resiliency officer, right, with  
7 the funding that we're getting -- Is that --

8 MR. GOMEZ: We're --

9 CHAIR PATHMAN: Maybe. Maybe.

10 MR. BORGES: Okay.

11 CHAIR PATHMAN: Let's not worry about that.

12 MR. BORGES: Okay. But, you know my point is  
13 that, yeah, a lot of these things happen  
14 immediately. So, there needs to be, like, an  
15 emergency action plan that, maybe, this committee  
16 could try to --

17 CHAIR PATHMAN: Well, let's --

18 MR. BORGES: -- outline, you know, and take it  
19 forward.

20 Again, we know that the county is taking a lot  
21 of leadership. So, you know, one of my things is  
22 not to have redundancy, you know; because, you  
23 know, it's okay for everybody to peddle their own  
24 bikes but if we all, sort of, peddle this issue  
25 forward as a collective --

1           CHAIR PATHMAN: Well, I think, right now, we  
2           have to act independent. We are the Miami Sea  
3           Level Rise Committee and while we would like to,  
4           one day, have that understanding and, maybe, the  
5           Rockerfeller grant is the first thing with the  
6           county, we need to take charge of what's going in  
7           the City of Miami.

8           I think if you have, you know, -- You know,  
9           you and I have been doing this dance for a long  
10          time and, you know, we saw in the Netherlands what  
11          they were capable of doing. They're really  
12          addressing their issues in some degrees.

13          MR. BORGES: Well, again, --

14          CHAIR PATHMAN: What do you think should be  
15          the first step we should be doing here so that we  
16          get the planning department in the City of Miami to  
17          address this issue?

18          UNKNOWN SPEAKER: Modify the code.

19          UNKNOWN SPEAKER: Coding. Coding.

20          MR. BORGES: I think that the city commission  
21          should request -- You know, the policy makers  
22          should request that all of the directors of  
23          planning and zoning, the building department, the  
24          fire department, public works department -- those  
25          four departments, come up with their own, kind of,

1 senior level committee to have a conversation about  
2 how do we start modifying these codes.

3 Of course, the way that other cities are doing  
4 it, like Miami Beach, is that they hire an outside  
5 consultant to tell them what they need to do.

6 So, you know, it's kind of weird for a  
7 committee who is voluntary and, you know, we're all  
8 here pro bono, you know, to really give them the  
9 nuts and bolts of the solutions. You know, you  
10 really expect an outside source, consultancy, to  
11 sort of guide that process.

12 Now, as a design thinking process it's very  
13 complex and I also believe that if you don't have  
14 good idea, you know, that are, you know, good solid  
15 ideas, sometimes you end up damaging the city.

16 So we should suggest, you know, through an --

17 CHAIR PATHMAN: Yeah. Let's start -- We're  
18 not going to be final say. But, if you feel that  
19 they should work internally first and then consider  
20 hiring outside consultants to take up these issues,  
21 let's frame what those issues are that we think  
22 they should be looking at and, potentially,  
23 bringing in an outside consultant to look at --

24 MR. A. GOMEZ: But, that's a dangerous issue.  
25 Albert Gomez.

1 CHAIR PATHMAN: -- if we're going to do that.

2 MR. A. GOMEZ: There are dangerous issues;  
3 because, the biggest contention right now with that  
4 whole organization, right now, that's doing this,  
5 the advisory -- And, I know your history, too.

6 So, the advisement in Miami Beach -- has a big  
7 scientific community in South Florida here, which  
8 I'm pretty close to, which are very up in arms  
9 about the solutions that they're bringing forward  
10 via this advisory board.

11 Not only that, the advisory board was --  
12 they've been like ordained.

13 CHAIR PATHMAN: Right. We're not doing that.  
14 That's not what our --

15 MR. BORGES: But, you're talking about the Sea  
16 Level Rise --

17 MR. A. GOMEZ: (Indiscernible).

18 MR. BORGES: -- Task -- the blue ribbon panel.

19 MR. A. GOMEZ: A Dutch solution ain't going to  
20 follow South Florida's --

21 CHAIR PATHMAN: Right.

22 UNKNOWN SPEAKER: -- problems; --

23 UNKNOWN SPEAKER: Right.

24 UNKNOWN SPEAKER: -- you know.

25 MR. BORGES: No. But, I was referring more to

1 what AE Com is doing and AE Com was hired by the  
2 city as an international consultancy.

3 Are you referring to that, to that report?

4 MR. A. GOMEZ: Yeah.

5 MR. BORGES: Yeah? Okay.

6 CHAIR PATHMAN: But again, my -- I think what  
7 we should do is that we -- And it doesn't have a --  
8 We just need to say that these are issues that you  
9 raise concerning, you know, building, you know, a  
10 -- re-doing codes, building for the future, designs  
11 that combats flood and sea level rise. And, you  
12 know, how do we use the best technology available.

13 I think that's the kind of motion we should  
14 frame for tonight and pass that along to the  
15 administration.

16 This is, you know, a standing committee. It's  
17 not a sunset. And, we'll see what the response is  
18 coming back.

19 MR. BORGES: These should be -- These items  
20 should be treated with high priority and  
21 transparency and move it forward.

22 CHAIR PATHMAN: That's -- Yeah. So, if you'd  
23 like to make a motion along those lines -- what you  
24 feel. I think we should.

25 MR. BORGES: Yeah. I would put out a motion



1           that the city commission, perhaps, should take  
2           leadership in establishing a more cohesive inner  
3           working between public works, planning and zoning,  
4           the building department and fire and emergency  
5           management in the City of Miami and start to talk  
6           about what are the objectives -- what are the  
7           things of integration that we need to look at.

8                     And, I think, Pete brought up a lot of issues  
9           that affects what he does to make sure that life  
10          safety and emergency management are cohesive.

11                    And, I kept on thinking of all kinds of other  
12          things that affect public works and building and  
13          zoning, as well.

14                    So, I think that integration of that  
15          conversation should be had by the leadership of  
16          these departments, you know, in the open so we  
17          could establish, maybe, the right criteria and,  
18          maybe, start to look at outside consultancies that  
19          would be hired.

20                    CHAIR PATHMAN:  It's kind of -- Let's try to  
21          frame the motion a little bit more narrow because  
22          --

23                    MR. BORGES:  You're the attorney.  I'm an  
24          architect with crazy ideas.  So, --

25                    VICE CHAIR CALE:  Uh-huh.

1 CHAIR PATHMAN: I'm trying to help.

2 MR. BORGES: I'll let you synthesize it.

3 CHAIR PATHMAN: I think that the motion that  
4 should come from the committee is a suggestion to  
5 the administration and the commission to have the  
6 various departments -- building, planning, fire,  
7 you know, look at -- public works -- and look at  
8 this issue from a collective standpoint to figure  
9 out how the codes can be amended to include and  
10 designed to combat sea level rise and to use the  
11 best technology available and see if there is a  
12 solution.

13 From that, we may learn that there is,  
14 potentially, the need to hire outside or continue  
15 to have things brought to this committee that we  
16 will make recommendations on.

17 That's the motion, I think, that we should  
18 make; is to get them to concentrate together on  
19 this issue and look at technology and changes in  
20 the code.

21 MR. BORGES: Yeah. The only thing I would add  
22 would be sea level rise and resiliency. You know,  
23 code implications; because, resiliency, you know,  
24 deals with so many other aspects other than sea  
25 level rise.

1 CHAIR PATHMAN: I think that we have the  
2 making of a motion. You may have to tweak that.

3 Matt, you're looking at me like we've got to  
4 narrow that down.

5 MR. HABER: I think we've found the motion  
6 part of it; but, you might need a second.

7 CHAIR PATHMAN: Okay. No, I know. I just  
8 want to make sure you weren't saying about -- we  
9 need to shorten the motion. Okay.

10 So, at this point is there a second?

11 UNKNOWN SPEAKER: I'll second it.

12 CHAIR PATHMAN: Okay. All those in favor of  
13 the motion please say aye?

14 (Thereupon, responses were in the affirmative.)

15 CHAIR PATHMAN: All of those opposed?

16 (Thereupon, no responses were heard.)

17 CHAIR PATHMAN: Any abstentions?

18 (Thereupon, no responses were heard.)

19 CHAIR PATHMAN: None? Seeing none, the motion  
20 passes.

21 All right. Next we have --

22 MR. REGALADO: Mr. Chair?

23 CHAIR PATHMAN: Yes.

24 MR. REGALADO: If I can actually --

25 CHAIR PATHMAN: Sure.

1 MR. REGALADO: -- bring up something. I don't  
2 know if -- you know, that you'd be open to giving  
3 the presentation again.

4 MR. BORGES: (Indiscernible) many times.

5 CHAIR PATHMAN: He's a 24/7 guy, 365.

6 MR. REGALADO: Yeah. We should approach the  
7 planning and zoning committee and give them this  
8 talk and have them on board. With anything that  
9 goes through P&Z, any new -- anything new, they're  
10 the ones that get it first.

11 So we should get them on board and  
12 understanding the real issue and, maybe, they'll  
13 even move it quicker and do their own -- a  
14 secondary motion.

15 MR. BORGES: Mr. Chair, could I just say a two  
16 minute quick story?

17 CHAIR PATHMAN: Two minute quick story?

18 MR. BORGES: Two minutes.

19 CHAIR PATHMAN: You've never done anything in  
20 two minutes.

21 MR. BORGES: Two minutes.

22 CHAIR PATHMAN: All right.

23 MR. BORGES: Okay. So we just experienced  
24 something in Miami Beach. You know, Miami Beach is  
25 raising the city. Right? You know, they're really

1 doing incredible actions I think -- and I'm not,  
2 you know, making a political statement -- that I  
3 think are very pro-active and of great urgency.

4 I've requested three foot height bearings on  
5 one of my projects to make the project more  
6 resilient and I was denied by the Design Review  
7 Board because they felt they didn't have the power,  
8 the authority, to give me that three feet.

9 And, you know -- So, like, I'm building this  
10 twenty million dollar house for my client and I'm  
11 like -- You know, I think it's deficient in that  
12 sense. And that's what we see when all of the  
13 boards are not educated and, maybe, aligned with  
14 the policy makers and with some of the big thinking  
15 that cities need to have now to look at the big  
16 picture of what happens, you know, to South Florida  
17 in this new world, you know; because, it's a little  
18 difficult to imagine.

19 CHAIR PATHMAN: Yeah.

20 MR. BORGES: You know, what we saw in  
21 Amsterdam is that they have incredible visual  
22 simulation software where you could really  
23 visualize flooding in any neighborhood to any  
24 extent; like, real life, you know. And we don't  
25 have that, you know. And, I think, visuals are

1 important; because, when people really understand  
2 what happens -- You know, when you have a forty-  
3 five minutes, you know, saturated storm, you know,  
4 in downtown Miami what happens. You know, what  
5 happens is gridlock and the water doesn't know  
6 where to go and all of that stuff.

7 So, when you can simulate that and you can  
8 educate people that's fantastic. So, simulation  
9 should be part of --

10 CHAIR PATHMAN: Why don't we --

11 MS. BLONDET: Wayne, can I make a suggestion?

12 CHAIR PATHMAN: Yeah. Sure.

13 MS. BLONDET: I'm really bordering on --

14 CHAIR PATHMAN: Just put your name on the  
15 record?

16 MS. BLONDET: Lillian Blondez. I know you've  
17 --

18 CHAIR PATHMAN: Thanks.

19 MS. BLONDET: -- already done your motion.  
20 But, having worked with some of the (indiscernible)  
21 in the city, I think planning and zoning is a great  
22 idea. We also need to address the City of Miami  
23 with all of their infrastructure. You may have a  
24 new building being built ten feet above sea -- you  
25 know, street level. What happens to the one next

1 door if there is an old building?

2 UNKNOWN SPEAKER: Yeah.

3 UNKNOWN SPEAKER: Right.

4 CHAIR PATHMAN: We all know what happens to  
5 that building.

6 MS. BLONDET: (Indiscernible).

7 MR. BORGES: One of the things that we see  
8 when we adapt cities is that it's an imperfect  
9 process.

10 UNKNOWN SPEAKER: It's the (indiscernible).

11 MS. BLONDET: So, (indiscernible).

12 MR. BORGES: It's really imperfect.

13 CHAIR PATHMAN: Well, --

14 MS. BLONDET: (Indiscernible) being built --

15 MR. BORGES: So, you know --

16 MS. BLONDET: -- there are a lot of areas in  
17 the city that are flooded --

18 MR. BORGES: Yeah.

19 UNKNOWN SPEAKER: Right.

20 MS. BLONDET: -- for many reasons --

21 CHAIR PATHMAN: Well, --

22 MS. BLONDET: -- and they're not getting  
23 re-built at the level that I'm hearing.

24 CHAIR PATHMAN: Jose, did you have a comment?

25 MR. REGALADO: I was just going to mention in

1 the last meeting we did bring up to eventually talk  
2 about protecting all of the historic sites and --

3 CHAIR PATHMAN: That's something for -- yeah,  
4 our next agenda. We're (indiscernible).

5 But, -- Yes. You had a question?

6 MS. FLETCHER: Yes.

7 CHAIR PATHMAN: Can you put your name on the  
8 record, please?

9 MS. FLETCHER: Kamalah Fletcher.

10 CHAIR PATHMAN: Can you speak a little louder?

11 MS. FLETCHER: Kamalah Fletcher.

12 CHAIR PATHMAN: Okay.

13 MS. FLETCHER: I am also wondering if there is  
14 space or opportunity to have -- for each motion or  
15 for each area of study to have something specific  
16 around socio-economic vulnerable communities.

17 I didn't have the feeling -- And, I apologize  
18 if I missed that area. But, I just always feel  
19 like in any conversations I have very little faith  
20 that it comes down to low income communities.

21 So, I don't know if there's an opportunity for  
22 every motion for there to be specific  
23 recommendations around how to address it and put  
24 resources towards low income communities.

25 CHAIR PATHMAN: We did discuss that at our



1 last meeting. It is a topic that we're going to be  
2 bringing up in one of our next meetings.

3 This, being our second meeting, it's hard to  
4 get everything on our agenda.

5 But, our intent is, at least, from this  
6 committee, that everything we do is for the entire  
7 community. It's not for just one area.

8 We know, those of us that are sitting at this  
9 table that this is going to be something that  
10 effects everybody; absolutely, throughout the city  
11 and the socio-economic issues are, definitely,  
12 issues that need to be discussed and will be taken  
13 up.

14 I would like to say, though, along with what  
15 Jose was saying is that --

16 Ajani, maybe, you could, you know, invite the  
17 building department or someone from, you know,  
18 public works or both, maybe, to address the  
19 committee on our concerns and so we can deal with  
20 some of those issues directly and they can hear,  
21 also, from the public that -- you know, how real is  
22 this issue is.

23 We passed this motion which I think addressed  
24 the core of what we want to do and we'll continue  
25 to modify that. But, maybe, edu -- have them come

1 to a meeting. I think that would be a really  
2 interesting to have them hear what Reinaldo had to  
3 say and some of the rest of us on the committee and  
4 the public. And, we might get some feedback, then,  
5 directly.

6 UNKNOWN SPEAKER: I think --

7 UNKNOWN SPEAKER: Are we --

8 CHAIR PATHMAN: One second. One second. One  
9 second.

10 MR. STEWART: Before the next meeting or --

11 CHAIR PATHMAN: Pardon me? Well, we'll talk.  
12 We'll see what the agenda is. The next meeting,  
13 kind of -- in terms of the day it's when the county  
14 -- full county compact, I think, is -- if we go  
15 back to the original schedule.

16 MR. STEWART: That I --

17 CHAIR PATHMAN: So, we have to -- Yeah. So we  
18 have to go over that and see when it's going --

19 UNKNOWN SPEAKER: That's in Key West.

20 CHAIR PATHMAN: Really?

21 UNKNOWN SPEAKER: Yeah.

22 VICE CHAIR CALE: Uh-huh.

23 CHAIR PATHMAN: The Key West that Harold drew  
24 or the Key West that --

25 UNKNOWN SPEAKER: The one that's still here.

1 MR. A. GOMEZ: In support of best practices --

2 CHAIR PATHMAN: Right.

3 MR. A. GOMEZ: In support of best practices --

4 CHAIR PATHMAN: Again, you name. I'm sorry.

5 MR. A. GOMEZ: Albert Gomez.

6 CHAIR PATHMAN: Yes.

7 MR. A. GOMEZ: In support of best practices,  
8 based on going to the planning committee and going  
9 to the building codes and trying to identify a  
10 rate, Ajani, I'm going to send you a link. I was  
11 part of a GIS day on sea level rise at FIU this  
12 last Friday and there were about ten presentations  
13 and every single one of those presenters were  
14 Ph.D.'s in climate, resilience, sea level rise,  
15 geology and oceanography. They had an intensive  
16 GIS mapping and modeling on what the real rates are  
17 and what are the real risks based on our permeable  
18 coast topograph.

19 So, frankly, I think if we're going to bring  
20 this to bear let's have the science there. And  
21 that's just a readily available resource that's  
22 already -- It should be up on the digital commons  
23 by tonight if not by tomorrow.

24 So, I'll make sure Jennifer (indiscernible),  
25 the director, sends you a link directly. So you're

1 free to go in and dig in and grab whatever you  
2 want.

3 MR. STEWART: Okay. Thanks for that, Albert.

4 CHAIR PATHMAN: Okay. We're going to -- You  
5 know, Albert and everybody else, you know, that --

6 The problem I've always seen in dealing with  
7 this issue is that if you throw out too much you  
8 get absolutely nothing back. And, especially --

9 UNKNOWN SPEAKER: It's bulk intensive.

10 CHAIR PATHMAN: Yeah. If it -- And,  
11 especially, if it's on the science side. You get a  
12 lot of head nodding, a lot of hand shakes and thank  
13 you very much, like the Governor did. And, we need  
14 to avoid that with this committee. We need to try  
15 to do it the right way and present it the right  
16 way. And, you know, as the committee continues to  
17 have meetings and we hear from the public and we  
18 formulate our ideas we will address that with the  
19 administration and the commission on a basis that  
20 we, hopefully, can be productive.

21 You know, I think if we throw out too much,  
22 you know, too fast, we're going to just be, you  
23 know, another committee that makes a recommendation  
24 that no one ever acts on.

25 So, you know, we appreciate here, at this

1 level, getting all of the information. How we  
2 digest that and then convey it is another issue.  
3 And, hopefully, you know, people like yourself,  
4 Albert, will help us work to do that in a  
5 meaningful way. And. I think that's what we need  
6 to do in the future.

7 I want to move along on the agenda at this  
8 time. Dr. Tabitha Cales will be presenting on  
9 mapping and modeling on SLR (Sea Level Rise) in the  
10 City of Miami.

11 VICE CHAIR CALE: All right. What I  
12 originally mentioned this topic it was something  
13 that I was really hoping we could have a  
14 presentation given by somebody who has a lot of  
15 expertise in this area and is really familiar with  
16 a lot of the different tools.

17 So, I'll probably be brief and, maybe, make a  
18 motion about bringing this back with more detail to  
19 examine.

20 But, basically, there a lot of sea level rise  
21 mapping tools out there. There's one from NOA  
22 (National Oceanic and Atmospheric Administration).  
23 There's one from Climate Central. There are some  
24 of these really in-depth 3-D models that have  
25 already been mentioned tonight that have been put

1 together in the Netherlands where you can visualize  
2 how water will move through a city and, kind of, a  
3 really fine scale level.

4 So, looking at something like the maps from --

5 UNKNOWN SPEAKER: Harold Walmus.

6 VICE CHAIR CALE: -- Harold Walmus, you know,  
7 I feel like people who live in Miami are familiar  
8 with seeing those types of maps and looking at  
9 different versions of the same map.

10 It is at ten feet? Is it at two feet? What  
11 level are we looking at?

12 And, I think that tells a really different  
13 picture and sits in your mind differently than  
14 looking at something on a finer scale that shows  
15 the buildings on the street where you live and what  
16 it's going to look like to see water moving through  
17 them.

18 So, I guess, just -- I wanted to bring this up  
19 as something -- Maybe, we can even pull up, maybe,  
20 like the NOA mapping feature or something.

21 Just from anecdotal perspective, in looking at  
22 some of these maps, like from Dr. Walmus, a lot of  
23 people don't realize that some of the area that are  
24 more vulnerable to flooding aren't just the places  
25 along the coast.

1           You know, we've got sunny day flooding on  
2 Miami Beach. We know, just from when I used to  
3 work on Brickell, there are parts of Brickell that  
4 flood. There are places in Edgewater that flood.

5           I think people think of some of those coastal  
6 areas. But, they also may not realize that some of  
7 the communities out west like you've mentioned --  
8 places that weren't built off the ridge, places  
9 that are in lower elevations, places that are  
10 closer to the Everglades. Those are also going to  
11 start to flood, sometimes, just as soon as some of  
12 the coastal areas.

13           So, I think making sure, you know, relevant  
14 departments and agencies -- And based on the time  
15 scale that they're looking at, if you're planning  
16 for, you know, ten years versus the lifetime of a  
17 building that you may want to have around for fifty  
18 years, a hundred years, the level of sea level rise  
19 you want to look at is probably going to be  
20 different based on the planning horizon you're  
21 looking at.

22           So, whether or not you're looking at the last  
23 map in Walmus's series or the first one it just,  
24 kind of, depends on the work you're doing and the  
25 time scale it's based on.

1           So, some of these maps, you know, have more or  
2           less details. Some are, kind of, more relevant  
3           just for somebody who is, you know, an interested  
4           citizen who wants to see what things are going to  
5           look like across the state with two feet of sea  
6           level rise. Somebody may want to see more detail  
7           down to their neighborhood and what's going to  
8           happen.

9           So, I guess, I really just wanted to make sure  
10          we were talking about the fact that there are these  
11          existing models.

12          Is it something where, maybe, there's a sea  
13          level rise mapping tool that is really going to be  
14          relevant and useful for certain agencies to use as  
15          they move forward with planning?

16          I know that, for example, Broward County has  
17          really been starting to already work on moving  
18          forward with implementing some of the  
19          recommendations from the Southeast Florida Regional  
20          Climate Change Compact.

21          So, I guess, hopefully, in a future  
22          presentation we can, maybe, get someone who is more  
23          knowledgeable on some of these different mapping  
24          tools and what they are useful applications are and  
25          then provide us with that information so then,



1 maybe, we can make recommendations that are for  
2 relevant departments that aren't utilizing things  
3 that already exist; that we can, kind of, feed that  
4 into their decision-making process.

5 And then, if there are, you know, more  
6 detailed levels of GIS, kind of, mapping --

7 UNKNOWN SPEAKER: Yeah.

8 VICE CHAIR CALE: -- if there is existing data  
9 that we can help connect people to, to feed in or  
10 to find out what information they need to make  
11 those tools they're creating, specifically for this  
12 area, most useful.

13 MR. BORGES: Like, what we've done in the  
14 past, when we have like focus design exercises in  
15 certain regions --

16 VICE CHAIR CALE: Uh-huh.

17 MR. BORGES: -- we do high resolution GIS at  
18 different elevations. So, we --

19 VICE CHAIR CALE: Right.

20 MR. BORGES: -- just say these are all of the  
21 different things that could happen through time to  
22 help, you know, decision-making and  
23 (indiscernible); --

24 VICE CHAIR CALE: Right. And, I think there's  
25 a lot of overlap --

1 MR. BORGES: -- very high resolution.

2 VICE CHAIR CALE: -- once you get into  
3 thinking about details; what emergency managers  
4 need to know, what people who are architects and  
5 designing cities need to know, what people who are  
6 thinking about planning and zoning needs to know.  
7 Because, as we grow and change and adapt talking  
8 about the awkward (indiscernible) phase what  
9 happens when you raise a road that all of a sudden  
10 floods somebody who before was not having problems  
11 with flooding?

12 So, thinking about how we're making sure we're  
13 feeding the right information into these type of  
14 modeling tools to make sure we're getting out the  
15 results we need to plan effectively and move  
16 forward effectively and knowing that those details  
17 and, kind of, data streams are going to be  
18 different depending on if it's something you're  
19 planning for emergency management or if it's  
20 something that city planners need to know.

21 So, I apologize for this being, kind of, very  
22 short and all over the place. But, I initially  
23 brought this up at our first meeting saying I  
24 wanted to make sure we have a sense of looking at  
25 the city. You know, familiarizing ourselves in a

1 very, kind of, high level way.

2 What are the parts of the city that are  
3 already most vulnerable to flooding?

4 So, I don't know if we can zoom in to Miami.  
5 Maybe, like a foot level --

6 MR. GOMEZ: Yeah. It's (indiscernible).

7 VICE CHAIR CALE: I just --

8 MR. GOMEZ: It zooms in a lot more.

9 VICE CHAIR CALE: Just so people can see the  
10 parts of the city that are most likely going to be  
11 more affected or --

12 UNKNOWN SPEAKER: So, Dr. Cales --

13 UNKNOWN SPEAKER: Climate Central has a link  
14 to the NOAH maps, as well.

15 UNKNOWN SPEAKER: It says sea level rise --

16 VICE CHAIR CALE: Oh, okay.

17 UNKNOWN SPEAKER: Climate Central has a very  
18 user friendly website that gives you the reading  
19 there and you can adjust it, you know.

20 UNKNOWN SPEAKER: Yeah. Yeah. The slider --

21 UNKNOWN SPEAKER: You like that slider?

22 UNKNOWN SPEAKER: Yeah.

23 UNKNOWN SPEAKER: (Indiscernible) you move it  
24 across and you'll see how it changes the map.

25 VICE CHAIR CALE: And, I just want to

1 (indiscernible) this up.

2 I'm sure there are folks in this room that are  
3 familiar with different mapping tools. But, are  
4 there any recommendations for ones that people know  
5 about or ones that have been used and applied in  
6 other situations that are useful or --

7 MR. RUPERT: Thomas Rupert with the State of  
8 Florida Sea --

9 One of them that might be useful is NOAH has a  
10 very new one called the Flood Exposure Map.

11 VICE CHAIR CALE: Uh-huh.

12 MR. RUPERT: And so, it can actually integrate  
13 sea rise, storm surge, FEMA flood maps and a number  
14 of different data points in order to get a better  
15 feeling for flood exposure than just  
16 (indiscernible).

17 VICE CHAIR CALE: Uh-huh?

18 MR. BORGES: I think we should have a session  
19 that is focused on mapping; because, you know, --

20 VICE CHAIR CALE: Yes.

21 MR. BORGES: -- understanding the map and  
22 understanding how water behaves through time, in  
23 the community, is very important.

24 VICE CHAIR CALE: Right.

25 MR. BORGES: So, we should have a very focused

1 -- I know, Tiffany -- I talked to her at FIU -- was  
2 telling me that (indiscernible) some kind of  
3 virtual reality --

4 CHAIR PATHMAN: Speak up. They can't hear  
5 you.

6 MR. BORGES: -- that's available. I was  
7 referring to --

8 UNKNOWN SPEAKER: You're from FIU, right?

9 UNKNOWN SPEAKER: No.

10 MR. BORGES: Oh, University of Florida. I'm  
11 sorry. Florida -- You mentioned Florida Gators.

12 So, anyway; FIU has --

13 UNKNOWN SPEAKER: He works with a lot of --

14 MR. BORGES: Have you seen the visualization  
15 tool that they have at FIU? Yeah. Because, I  
16 think it would be great to have, like, maybe, a  
17 committee meeting --

18 MR. A. GOMEZ: Jennifer (indiscernible), the  
19 person I mentioned is the person who coordinated  
20 that with the journalism school, as well. So, it's  
21 the journalism school and GIS Center which are  
22 putting that together. So, that's part of that  
23 presentation. That will be in there, as well.

24 That will be a big resource to help augment  
25 this kind of mapping and, --

1 VICE CHAIR CALE: Right.

2 MR. A. GOMEZ: -- I guess, simulations.

3 VICE CHAIR CALE: And I think just from a  
4 really generic, kind of, first look at this -- just  
5 so people can familiarize themselves, you know,  
6 it's not just the beach. It's going to be around  
7 Miami River; kind of, up north by -- What is that?  
8 Is that Arch Creek? The area that's --

9 UNKNOWN SPEAKER: Edgewater.

10 VICE CHAIR CALE: No. At the top of the map?

11 MR. A. GOMEZ: There was Little River.

12 UNKNOWN SPEAKER: Little River.

13 MR. A. GOMEZ: The scary thing about this is  
14 that once people start to realize -- And the  
15 biggest gap that I've seen -- Once people, policy  
16 makers, --

17 CHAIR PATHMAN: Albert, put your name on the  
18 record because it's hard for them to --

19 MR. A. GOMEZ: Albert Gomez. Sorry about  
20 that.

21 CHAIR PATHMAN: Yeah.

22 MR. A. GOMEZ: Once people start to -- Once  
23 the policy makers start to really take this as a  
24 tool for advising their policy there's going to be  
25 a stark reality in South Florida that we're talking

1 about one and half mortgage cycles max and we're  
2 going to have to get the hell out of dodge and  
3 people don't want to, like, kind of, come up with  
4 that and address it and that's why what I see the  
5 biggest gap is and what a lot of the other  
6 professors and people that are brining these maps  
7 together, is that the citizenry -- other than the  
8 311 tool of mapping incidents, don't have any  
9 engagement to their government body to be able to  
10 communicate in that mapping reality; because, it's  
11 their backyard.

12 VICE CHAIR CALE: Right.

13 MR. A. GOMEZ: If the king tide is in -- it's  
14 lapping up against the back of my door, I want to  
15 be able to map that, show it to --

16 VICE CHAIR CALE: Right.

17 MR. A. GOMEZ: Have an open source.  
18 Everybody knows about it. So that it's not like  
19 oh, we've got 27 incidents of king tide or we have  
20 4,000 calls of people dealing with flooding today.  
21 But, it's not in a open search format. So, we  
22 don't have that, kind of, upward/downward, kind of,  
23 back and forth communication. And, as incidents  
24 start to occur I think emergency management is  
25 going to have to see that and, probably, engage on

1           that.

2           And, I know that the 311 tool is a charter and  
3           it requires you to act on it, on an incident  
4           management basis. But, I'm wondering how can we  
5           engage the public more; because, we can start to do  
6           positive things; resilience programming on it.

7           Engagement with the public, right now, is all  
8           doom and gloom and there is no way out of it. But,  
9           we can make this a positive engagement.

10          MR. BORGES: Albert, what is your area of  
11          expertise?

12          MR. A. GOMEZ: I'm a technologist. I'm a  
13          designer. I'm a manufacturer. I design --

14          MR. BORGES: Because, you've gotten really  
15          involved in resiliency. So, I --

16          MR. A. GOMEZ: I'm in fenstration. I do a lot  
17          of impact windows and doors. I do a lot of code  
18          and energy management. I'm in new design thinking,  
19          innovative ideation.

20          MR. BORGES: So, you know, I think to react as  
21          a committee member -- react to what you're saying,  
22          okay -- And, you were at the presentation at the  
23          AIA the other night? Did I see you there?

24          MR. A. GOMEZ: Briefly. I left.

25          MR. BORGES: Briefly? Okay. So, you know,



1 what I find is that, first of all, this is not a  
2 fun conversation to have --

3 MR. A. GOMEZ: No.

4 MR. BORGES: -- anywhere that we have it, you  
5 know. I'm like why am I involved in this  
6 conversation; because, you know, I could be having  
7 a beer and having fun somewhere at the Miami Heat  
8 game or something like that. But, you know, I  
9 committed as an architect that this was important  
10 to my practice and to what I leave as a legacy as a  
11 practitioner.

12 But, anywhere we go this is a difficult  
13 conversation. This is the second committee meeting  
14 that we've had here tonight. So -- And, I don't  
15 know that anybody has been dooming and glooming  
16 this issue. But, this is a difficult issue and I  
17 think that this is the beginning of something good.

18 You know, one of the things that I said at the  
19 AIA event the other night is that there's a  
20 resiliency guru now at the county. That's  
21 something good.

22 There's one in Miami Beach now; Susie -- that  
23 came from Broward. That's something good.

24 There's going to going to be one in the City  
25 of Miami with some expertise and some depth.

1           The thing that we all have to make sure of is  
2           that these people really have courage and that we  
3           back them; because, they're going to be hitting the  
4           wall of bureaucracy and political forces --

5           UNKNOWN SPEAKER:   And truth.

6           MR. BORGES:   -- and truth.   But, you know -- I  
7           mean if we don't face this truth, you know, it's  
8           just going to happen to us anyway.   Right?

9           So, I just think in this, sort of, planning  
10          and design thinking that you're referring to it's a  
11          long-term conversation.

12          And, what I also like to remind myself and  
13          others is that this is a marathon.   This is not  
14          something that's happening, you know --

15          MR. A. GOMEZ:   Right.   And that's the point I  
16          -- To her point, since in this section we're  
17          talking about GIS.

18          VICE CHAIR CALE:   Right.

19          MR. A. GOMEZ:   I just think that there's a  
20          huge opportunity to engage the civic -- the public,  
21          in general, as a positive tool.

22          VICE CHAIR CALE:   Right.

23          MR. A. GOMEZ:   GIS is nascent to the public  
24          right now.   It's not being utilized -- You can go  
25          on the site and --

1 MR. BORGES: You --

2 MR. A. GOMEZ: -- (indiscernible). That's all  
3 they do.

4 VICE CHAIR CALE: What (indiscernible) is  
5 there? I really want to make sure, in general, as  
6 a member of this committee that the recommendations  
7 we're making we're being thoughtful about them;  
8 that we're thinking about, you know, things that  
9 really can be implemented by the city. And, I  
10 think, whenever we can, possible, have  
11 representatives from -- you know, from the  
12 departments that are going to be putting these  
13 things into place so that we can get their feedback  
14 early on and, hopefully, they are recommendations  
15 that then the city will take on.

16 But, I think, you know the other aspect of  
17 making sure that this is public, that people are  
18 aware of, you know, these issues and that  
19 information is accessible -- I think that both of  
20 these are important components of this.

21 MR. A. GOMEZ: Yes.

22 CHAIR PATHMAN: Tabitha, tonight, what would  
23 you like to see the committee do?

24 VICE CHAIR CALE: Well, I think just one other  
25 comment related to this and then I'll mention what

1 I think I'd like for us to do tonight.

2 But, just to, you know, make that point. You  
3 had mentioned about king tide. When we look at  
4 some of these maps it's very static.

5 We know that this is not a static thing.

6 You know, every time we have the king tides,  
7 it's all of a sudden, much more visually apparent  
8 that sea level rise is starting to affect the city.

9 MR. A. GOMEZ: That's true.

10 VICE CHAIR CALE: And we know that this is  
11 something that is going to be changing in the  
12 future.

13 So, when we look at some of these mapping  
14 tools, we also need to make sure we're thinking  
15 about how king tide is going to overlap with  
16 whatever base change and condition we're likely to  
17 have; how a storm surge is going to overlap with  
18 this and where. So, where you're going to see more  
19 intense and high levels of flooding because of  
20 those additional added layers.

21 So, just to throw that out there as one last  
22 comment.

23 But, I guess for my motion for tonight, I  
24 would like to see us bring back to the committee  
25 additional information about some of the existing,

1 mapping tools; maybe, have feedback from, if  
2 possible, other experts who are already using some  
3 of these tools, maybe, in other cities or counties  
4 within the local area or other -- just other  
5 experts that are aware of them.

6 And then, provide that information back to us  
7 so we can have a more thoughtful discussion about  
8 mapping tools and how it can be utilized.

9 So, I think the -- And the two ways I would  
10 like to see us address mapping are how can it be  
11 used to better inform some of the work of  
12 departments within the city that are going to need  
13 this information to plan for how they're going to  
14 adjust to these changes that we can see visualized  
15 in these tools and then how can we make some easy  
16 to understand, easy to interpret maps available,  
17 maybe, on the website; maybe pick one that we think  
18 is user friendly to then provide so people can look  
19 at the their neighborhood or look up, you know, an  
20 area they're interested in, in the city, just to  
21 make that accessible for the public and available  
22 on our site.

23 MR. GOMEZ: Can I make a recommendation that  
24 we try it through out IT Department and --

25 CHAIR PATHMAN: Pete, just put your name on

1 the record.

2 MR. GOMEZ: I'm sorry. Pete Gomez. -- that  
3 we reach out to our IT Department and GIS people so  
4 that we don't undercut them. They might think --

5 CHAIR PATHMAN: Right.

6 MR. GOMEZ: And they're pretty good. I've  
7 dealt with them in the past and anything I ask for,  
8 any layer that I ask for, they provide it to me in  
9 a pretty timely fashion.

10 So we could have, you know, experts as you say  
11 in the (indiscernible) right within our own  
12 government that we can reach out to.

13 MR. BORGES: One of the things --

14 CHAIR PATHMAN: Put your name --

15 MR. BORGES: Reinaldo Borges. One of the  
16 things that we learned in the Netherlands is that  
17 they have these water boards that have of this  
18 information integrated and that's one of the thing  
19 that I think is, kind of, lacking. You know, like  
20 I know FAU has a model. FIU has modeling. The  
21 University of Miami, perhaps, with Walmus --

22 It's like there are so many modeling  
23 platforms, you know.

24 VICE CHAIR CALE: Right.

25 MR. BORGES: So if this data becomes more and

1 more cohesive -- The other thing that I would say,  
2 you know, from a planning point of view is like  
3 when you see map -- Like right now, we're looking  
4 at this Coconut Grove area with 2080 projections.  
5 How many feet is that?

6 MR. HABER: So the issue -- This is  
7 (indiscernible) -- This Matthew Haber talking.

8 CHAIR PATHMAN: Yeah.

9 MR. HABER: The issue is that it only uses  
10 projections based on the tidal (indiscernible)  
11 measurement.

12 MR. BORGES: Got you.

13 MR. HABER: So there (indiscernible) --

14 MR. BORGES: Okay.

15 MR. HABER: -- projection.

16 MR. BORGES: So you see a neighborhood like  
17 this and then, you know, it would be good to have  
18 geologists in the room and hydrologists and  
19 understand the fact that just because you see that  
20 it doesn't mean that the whole area is going to be  
21 lost. There are ways that we can mitigate that and  
22 that we could design towards protecting these area.

23 VICE CHAIR CALE: Uh-huh.

24 MR. BORGES: You know, for example, when you  
25 go to the Edgewater neighborhood in downtown Miami,

1           which is a neighborhood that is exploding with  
2           urban, high density development, you know, there's  
3           a new project that ARCHITECTONICA, Veronica Geo,  
4           has project and one of the thing that particular  
5           project could become is -- like, they could become  
6           a protective barrier --

7           VICE CHAIR CALE: Uh-huh?

8           MR. BORGES: -- for that neighborhood to a  
9           certain degree, you know; because, we know that  
10          barriers like that, in this community, are not as  
11          effective as the ones the Dutch may build in the  
12          Netherlands because of our geology.

13          But, that whole neighborhood could be  
14          protected by things like that, you know.

15          VICE CHAIR CALE: Uh-huh.

16          MR. BORGES: That idea has been presented to  
17          the city commission here already. It's been active  
18          in the community for a long time and no one that I  
19          know of has ever suggested that could become a tool  
20          to actually building more resiliency into that  
21          Edgewater, mid-town, neighborhood that is, you  
22          know, affected by this and by storm surge, as well.

23          So these are all things that I think, you  
24          know, we're going to have more and more  
25          conversation about; --



1 VICE CHAIR CALE: Right.

2 MR. BORGES: -- you know, planning,  
3 integration, ideas. And, I think that's one of the  
4 things Mr. Chairman that this committee be; is,  
5 sort of, a fountain of ideas, of innovation, of  
6 things that then we can create an action plan that  
7 the policy makers, hopefully, will adopt and turn  
8 into something of an action plan for the community,  
9 you know. So, it's not just --

10 You know, when we became involved in Miami  
11 Beach, I remember reading the storm water  
12 management document that the city had paid  
13 thousands of dollars for and it was never used by  
14 anyone.

15 So, a lot of these plan sit up, you know, in a  
16 desk, on a shelf, somewhere and sometimes officials  
17 point to them; but, they don't become actionable.  
18 And, that's one of things that I hope we could  
19 avoid, in this instance, with this committee.

20 CHAIR PATHMAN: Okay. I agree. But, let's  
21 make -- Let's try clarify the motion -- We, kind  
22 of, got off topic.

23 VICE CHAIR CALE: Okay.

24 CHAIR PATHMAN: -- as to what you envision as  
25 it relates to mapping, mapping tools.

1           I think Pete's suggestion is a good one; that  
2 we should, certainly, check our own resources first  
3 within the city and try to, you know, come back  
4 with a motion that we can adopt.

5           So, Tabitha, what do you think?

6           VICE CHAIR CALE: I think -- And, you know,  
7 similar to the motion that you made earlier where  
8 -- I guess, the motion on insurance and, you know,  
9 looking at additional details and then coming back  
10 and, maybe, making some recommendations for the --

11           Given that this is a subject that could take a  
12 lot of time, maybe, we'd even want to devote one or  
13 two whole meetings to it depending on, you know,  
14 how detailed we want to get.

15           But, to have, you know, maybe several  
16 different perspectives of people from -- Maybe,  
17 other municipalities that are already using some of  
18 these tools can speak. Someone from the IT  
19 Department could speak. Maybe, you have an agenda  
20 for a meeting that would gather several different  
21 experts where we could, you know, discuss and  
22 evaluate some of the interesting models and their  
23 potential implementation.

24           CHAIR PATHMAN: So, to frame it in a motion,  
25 let's say that -- to engage our own IT Department,

1 outside resources, as it relates --

2 VICE CHAIR CALE: Uh-huh.

3 CHAIR PATHMAN: -- to mapping of flood prone  
4 and sea level rise areas that will be -- areas that  
5 will be impacted by sea level rise, to do an  
6 internal study and invite speakers to come to  
7 address the committee.

8 How is that?

9 VICE CHAIR CALE: Yes.

10 CHAIR PATHMAN: Okay. Do I have a second?

11 MR. GOMEZ: I second that.

12 CHAIR PATHMAN: Okay. All of those in favor  
13 please say aye?

14 (Thereupon, responses were in the affirmative.)

15 CHAIR PATHMAN: Opposed?

16 (Thereupon, no responses were heard.)

17 CHAIR PATHMAN: Any abstentions?

18 (Thereupon, no responses were heard.)

19 CHAIR PATHMAN: Seeing none, the motion  
20 passes.

21 MR. BORGES: I think with this mapping idea,  
22 it's going to be part of formulating solutions, you  
23 know.

24 VICE CHAIR CALE: Right.

25 MR. BORGES: You know, (indiscernible)

1 planning and so on. So, it really starts with  
2 understanding the map, you know.

3 VICE CHAIR CALE: Uh-huh.

4 CHAIR PATHMAN: Okay.

5 MS. TASHIRO: And I do want to say that  
6 (indiscernible).

7 CHAIR PATHMAN: Please state your name?

8 MS. TASHIRO: Stephanie Tashiro. This is  
9 something that, from the city's perspective, not to  
10 argue -- you know, it's something that we never  
11 done. So, I know that we do use -- So, CIP, our  
12 Capital Improvements and Transportation Department  
13 uses maps to identify drainage projects in the city  
14 and we use maps in emergency management to look at  
15 where storm surge is likely to occur.

16 VICE CHAIR CALE: Right.

17 MR. TASHIRO: You know, the county has a great  
18 storm surge mapping program.

19 VICE CHAIR CALE: And, I think that's exactly  
20 what I'm looking for when I talk about, you know,  
21 other experts.

22 What existing tools are being used? Are they  
23 looking at levels we think are sufficient for the  
24 sea level rise, you know, as predicted?

25 Maybe it's just a matter of updating the

1 existing maps that are used or is it a matter of,  
2 you know, there are some departments that aren't  
3 using these things yet.

4 So, I think it would be nice to have, maybe,  
5 some kind of overview, if that's possible, of what  
6 is already being utilized at the city level and  
7 knowing that there are some things that are already  
8 being used at the county level and, you know,  
9 across the regional compact.

10 So, I think, maybe, that really is more -- in  
11 a clear way, kind of, what I was looking to  
12 evaluate and then see where we can go from there;  
13 if there are any deficiencies, if there's, you  
14 know, any additional resources that we know exist  
15 that could then be used to enhance or add to what  
16 may already be being used.

17 UNKNOWN SPEAKER: (Indiscernible).

18 CHAIR PATHMAN: I think that was covered in  
19 our first motion; because, our motion was to --

20 VICE CHAIR CALE: Right.

21 CHAIR PATHMAN: -- look at all of our current  
22 -- and consult internally and see what we have.

23 MR. BORGES: But, I think, this is kind of  
24 interesting because perhaps someone from the city  
25 could present to us how they're --

1 VICE CHAIR CALE: Yeah.

2 MR. BORGES: -- already using mapping --

3 VICE CHAIR CALE: Right. I think --

4 MR. BORGES: -- to look at (indiscernible)  
5 into the future in planning water management and  
6 transportation issues so that we can understand  
7 that and how it's already being used.

8 VICE CHAIR CALE: Uh-huh.

9 CHAIR PATHMAN: I think that's the essence of  
10 the motion we passed. So, I think -- And this will  
11 be on the -- you know, in our minutes. So, thank  
12 you very much, Tabitha.

13 Let's move it on. Ajani, do you want to  
14 quickly address the Climate Reality Project so we  
15 can try to, you know, wrap up; just what is coming  
16 up this week and then I have a copy of more issues.

17 MR. STEWART: Yeah. So, on November 13th, the  
18 Climate Reality Project, which is Al Gore's group  
19 (indiscernible) globally, is having their third  
20 annual 24 Hours of Realty event.

21 It's been viewed by over 20 million people  
22 globally for the last three years and it's a live  
23 webcast beamed around the world from eight  
24 different locations that have active climate  
25 concerns and are seen as, you know, hot places for

1 climate action.

2 This year it's going to be in Paris where the  
3 UN climate talks are scheduled to be held shortly;  
4 Mumbai, India, Delhi -- I'm sorry, that's the same  
5 thing. -- Sydney, Manila, Calgary, Rio de Janeiro  
6 and Miami.

7 So the way it happens is that for three hour  
8 segments, for eight three-hour segments equaling  
9 twenty-four hours, they do -- they jump to each  
10 region where they'll have leadership profiles and  
11 the elected officials, scientists, et cetera.  
12 There's also going to be, you know, some media  
13 events and a celebration of that region's work on  
14 climate issues and sea level rise, et cetera. And  
15 they'll be jumping to those regions for live  
16 webcasts.

17 So, on Friday, the thirteenth, Miami will be  
18 having their webcast from Lincoln Road, 1111  
19 Lincoln Road. I believe it's at 6 p.m. to 9 p.m.

20 So, I think it will be viewed live on the  
21 Climate Reality Project website.

22 There's been some work behind the scenes with  
23 Miami Beach, City of Miami, Miami-Dade County to  
24 come together to have -- to join that celebration  
25 from Lincoln Road and have experts and leadership

1 from all the municipalities and others  
2 participating to show what the communities are  
3 doing as a collaborative effort to address climate  
4 change and for the sea level rise.

5 Mr. Chair, do you want to speak to the press  
6 conference or --

7 CHAIR PATHMAN: You can touch it on for a  
8 second.

9 MR. STEWART: Okay. So, originally, the city  
10 was going to host a press conference leading up to  
11 this event.

12 Unfortunately, due to the short scheduling and  
13 trying to coordinate all of the elected officials  
14 we'll probably have to decline hosting the press  
15 conference leading up to that event; but Wayne,  
16 Mr. Chair, is in touch with the -- and I am also --  
17 with the local liaison with the Climate Reality  
18 Project who is in charge of coordinating the press  
19 conference and also the celebration event on Miami  
20 Beach.

21 So, when all of that is finalized, in terms of  
22 the press conference leading up to the event,  
23 please fell free to contact me for more information  
24 and I'll be happy to provide some details for that.

25 So, I think it's a very exciting event where



1 finally some, you know, spotlight will be shined on  
2 this area. I mean we are the epicenter for issues  
3 like this such as the sea level rise and the world  
4 will definitely be watching and seeing that our  
5 leadership is in action taking some positive  
6 measures on this issue.

7 CHAIR PATHMAN: Thank you. Thank you very  
8 much, Ajani.

9 You know, I have on the agenda here about the  
10 committee mission statement. I think we need to  
11 discuss this as a committee. But, I had hoped,  
12 when we made this agenda, that I would have had a  
13 chance to meet with some of the commissioners to  
14 get some feedback from them first before we tell  
15 them what our mission statement is.

16 Unfortunately, they weren't available between  
17 our first and second meeting.

18 I'm hoping to be able to do that in the next  
19 month.

20 And so, I think I'm going to table that for  
21 now on the mission statement until I get some  
22 direction from the commission and the  
23 administration.

24 I don't want to overstep our boundaries as a  
25 committee.

1           I think that at the next meeting I would like  
2           to have one guest speaker, someone who -- You know,  
3           I'm willing to take names. I have a few names I  
4           want to throw out there. It could be Harvey Ruvin,  
5           Harold Walms, someone from the re-insurance  
6           industry, either Swiss (indiscernible) or Munich  
7           (indiscernible), to give, maybe, like a twenty or  
8           thirty minute presentation.

9           Does the committee have any issues or anybody  
10          that they'd like to -- You know -- And, the list,  
11          by the way, is not just for -- We'll try to, over  
12          the months, get a lot of these speakers and we may  
13          have more than one at some of the meetings. But, I  
14          think it's interesting to get some feedback, maybe,  
15          from -- and Reinaldo's touched on it a little bit  
16          -- from the county. You know, Harvey Ruvin has,  
17          kind of, spearheaded that initiative there.

18          Some of you may have read the proposal that  
19          the county has passed.

20          By the time we have our next meeting, most  
21          likely, the full county compact will be over in Key  
22          West and we can report back on that.

23          But, I would like to invite someone to speak.

24          Does anybody else have any recommendations?

25          VICE CHAIR CALE: I think Harvey Ruvin would

1 be a great place to start in looking at what the  
2 county is doing and, maybe, even one of our, I  
3 guess, former members who is going to be --

4 CHAIR PATHMAN: Well, I'm not sure yet --  
5 Well, --

6 VICE CHAIR CALE: Okay.

7 CHAIR PATHMAN: -- if that'll happen -- We'll  
8 know before the next meeting what going on with  
9 that.

10 VICE CHAIR CALE: Okay.

11 MR. BORGES: Well, -- Because, I think if  
12 you're referring to Jim, it could be interesting to  
13 give Jim a platform to come back to us --

14 VICE CHAIR CALE: Uh-huh?

15 MR. BORGES: -- now and, sort of, give us his  
16 vision plan of --

17 VICE CHAIR CALE: Right.

18 MR. BORGES: -- what he's going to do at the  
19 county.

20 VICE CHAIR CALE: Exactly.

21 MR. BORGES: Because, I think in the spirit of  
22 collaboration it would be nice if -- it's something  
23 that we could collaborate with him on; that we're  
24 part of --

25 VICE CHAIR CALE: Uh-huh.

1 UNKNOWN SPEAKER: Uh-huh

2 MR. BORGES: -- his mission plan, as well.

3 VICE CHAIR CALE: I think that's a great  
4 suggestion.

5 CHAIR PATHMAN: I'd like to -- You know, with  
6 regards to Jim, we won't know that for a while.

7 VICE CHAIR CALE: Right.

8 CHAIR PATHMAN: And, I want to give Jim a  
9 chance to get situated --

10 VICE CHAIR CALE: Yeah.

11 CHAIR PATHMAN: -- in the county first before  
12 he actually comes back to us.

13 UNKNOWN SPEAKER: A month. We've given him a  
14 month.

15 CHAIR PATHMAN: So -- I mean Harvey -- My  
16 (indiscernible) is think Harvey would be good  
17 because he's led the initiative for many, many  
18 years.

19 VICE CHAIR CALE: Right.

20 CHAIR PATHMAN: You should see his take on,  
21 you know, whether the county is, what they passed,  
22 what they're doing.

23 Jim could be at the next meeting or even at  
24 the same meeting if we feel, you know, that that's  
25 the case.

1           But, I don't know, yet, where Jim is going to  
2           be on this committee, you know, or having had a  
3           chance to really get into his new role with the  
4           county. So, --

5           And there's a litany of potential speakers.

6           MR. McDOUGAL: Can I make a quick comment?

7           CHAIR PATHMAN: Yes. So just put your name on  
8           the record.

9           MR. McDOUGAL: David McDougal. So Harvey  
10          Ravin's letter that he sent to the congressional  
11          delegation from South Florida, U.S.  
12          Representatives, U.S. Senator was calling for a  
13          super fund and we've got like a limited time to try  
14          to raise a ton of money from both our federal  
15          sources and our state sources and I know that  
16          that's a really hard fight. But, right now, with  
17          Paris, with everything that's happening, there's  
18          actually political will that's emerging. You've  
19          got eleven Republicans -- congressional leaders  
20          that are signed on to --

21          CHAIR PATHMAN: On the bill?

22          MR. McDOUGAL: The bill, yeah. -- and  
23          recently -- So, how do we move that and take  
24          advantage of the time that we've got right now.

25          So, having Harvey and some folks that can help

1 us identify the funding and how to get to it --

2 And we've already got some leaders emerging  
3 out of the Coral Gables Chamber and out of some  
4 chambers that are going to be putting pressure on  
5 Tallahassee, coming up this next week.

6 So, thinking about that move -- because, the  
7 county is doing stuff. It's exciting that they're  
8 doing stuff. But, they need to raise a ton of  
9 money. That's what we've got do right now.

10 VICE CHAIR CALE: And is that a letter that  
11 you can share with the committee?

12 MR. McDOUGAL: Yeah. I don't have it with me.

13 CHAIR PATHMAN: So does anybody have any other  
14 -- I mean, again, we're going to have speakers and  
15 we're going to try to move our meeting into the  
16 actual chambers or, at least, a bigger facility  
17 where it's most appropriate and we don't have to  
18 turn around all of the time and wonder who is in  
19 the room.

20 So, it would be more appropriate to have  
21 speakers.

22 Does anyone have anyone else other than what I  
23 suggested for the time being? Have Harvey give us  
24 -- kind of, kick us off as our first speaker if  
25 he's available?

1 VICE CHAIR CALE: I think that sounds good.

2 CHAIR PATHMAN: And, of course, we'll talk --  
3 We'll know more -- I can't really comment on Jim  
4 yet; because, I don't know the action that's going  
5 to be taken and we'll be able to comment on him  
6 going forward and Ajani can advise the rest of the  
7 committee members.

8 VICE CHAIR CALE: And, I think it may make  
9 sense to wait until, you know, whoever the final  
10 person is for that job once it's all settled; give  
11 them time to, you know, get their feet on the  
12 ground and then be able to come to us with  
13 information and their vision for --

14 CHAIR PATHMAN: So, I'd like to --

15 VICE CHAIR CALE: -- things.

16 CHAIR PATHMAN: I'd like to make a motion --  
17 Wayne Pathman -- that we invite Harvey to speak as  
18 we, you know, formulate our agenda for the next  
19 meeting; have him come and speak and give him, you  
20 know, some -- twenty to thirty minutes to address  
21 the issues that the county is going to take and  
22 where they're going and some of his other visions,  
23 which are not even dealing with the county.

24 VICE CHAIR CALE: Second.

25 CHAIR PATHMAN: I've known Harvey for a long

1 time.

2 So, we have a second from the Vice-Chair,  
3 Tabitha.

4 All of those in favor say aye?

5 (Thereupon, responses were in the affirmative.)

6 CHAIR PATHMAN: All of those opposed?

7 (Thereupon, no responses were heard.)

8 CHAIR PATHMAN: Any abstentions?

9 (Thereupon, no responses were heard.)

10 CHAIR PATHMAN: None? Seeing none, the motion  
11 passes.

12 Before we go is there anything else from the  
13 public? Would anybody that's here tonight wish to  
14 make any other closing remarks?

15 MR. REGALADO: Mr. Chair, actually, I have --

16 CHAIR PATHMAN: Okay. One second.

17 MR. REGALADO: -- one comment and one motion  
18 to bring up.

19 CHAIR PATHMAN: Okay.

20 MR. REGALADO: It will be quick.

21 The first part is -- Albert, you mentioned  
22 that public familiarity with GIS.

23 MR. A. GOMEZ: Yes.

24 MR. REGALADO: In 2010, that's when Miami 21  
25 came into effect. Right?



1 MR. A. GOMEZ: Yeah.

2 MR. REGALADO: In 2010, when I was working in  
3 the Mayor's Office as a Special Advisor, I went to  
4 all of the meetings with the commissioners and the  
5 Mayor, that he would go around to each of the  
6 homeowner's associations and condos and everything  
7 else to teach them and inform them about the GIS;  
8 because you can get Miami 21 from that --

9 MR. A. GOMEZ: (Indiscernible) -- that permit  
10 -- that permit website to motivate --

11 MR. REGALADO: Right.

12 MR. A. GOMEZ: -- Miami 21 was a gorgeous  
13 thing and to allow for investment and it was just  
14 sitting nascent there right after it was done. And  
15 then, you know, they changed administration and  
16 that's what -- And, the thing I've seen is that  
17 from a permit aspect it's there. But, with regards  
18 to reaching out to the public and then creating  
19 layers or opportunities for them to engage on, it's  
20 --

21 MR. REGALADO: Right.

22 MR. A. GOMEZ: -- that's where it stops.

23 MR. REGALADO: It's -- And in regards to sea  
24 level rise -- although mentioned, it's a very dark  
25 conversation and anyone -- They just kind of throw

1 up their hands and just say, well, screw it.

2 There's nothing that we can do.

3 That's they're solution to that. I guess,  
4 that's what we're here for.

5 MR. A. GOMEZ: So, public comments -- I have  
6 something from you directly related to that.

7 MR. REGALADO: Okay. Good. What I was going  
8 to recommend is, maybe, that we talk to our own  
9 commissioners and they always meet -- You know,  
10 they're local. They're people who are, kind of,  
11 either at their house or at street corners or  
12 wherever -- To, kind of, go to those meetings --  
13 They usually have them once a month going around  
14 their districts. And, just reach out to them and  
15 start talking about sea level rise and what we're  
16 doing and what the city is doing.

17 MR. BORGES: Yeah. I think to follow up on  
18 that and I think follow up to a comment that Albert  
19 made is that I think that if we educate the  
20 political leadership in the community, right, then  
21 when we send a message out that we're taking some  
22 action, I think, you know, there will be less  
23 anxiety and less concern that -- you know, doom and  
24 gloom kind of a thing.

25 MR. A. GOMEZ: Right.

1 MR. BORGES: So this is so initial now.  
2 Right? So, if we act with intelligence, political  
3 leadership is informed, the planning and zoning  
4 board here, the board of adjustment, all of these  
5 people get informed to see how what they do every  
6 day in these boards may be affected by the learning  
7 and by the future visioning of what may be  
8 happening.

9 Then, I think, you know, taking action to that  
10 sort of grassroots --

11 MR. REGALDAO: Uh-huh.

12 MR. BORGES: -- and having neighborhood -- I  
13 mean Miami 21 took like -- I think like four years.  
14 I remember Elizabeth Plater-Zyberk going to like --

15 MR. REGALDO: Uh-huh.

16 MR. BORGES: -- endless meetings and this is  
17 just modification of a code --

18 MR. REGALADO: Yeah.

19 MR. BORGES: This is --

20 MR. REGALADO: Right. Because it was modified  
21 after the --

22 MR. BORGES: This is -- In a way it's more  
23 complex than that.

24 CHAIR PATHMAN: Jose, do you want to make a  
25 motion or is this just you're raising an issue that

1 you want us to discuss at a future agenda?

2 MR. REGALADO: If we could discuss it at a  
3 future agenda.

4 CHAIR PATHMAN: Okay.

5 MR. REGALADO: But, the motion I was going to  
6 bring up was at the last meeting I mentioned the  
7 possibility of attending COP-21 in Paris.

8 CHAIR PATHMAN: Uh-huh?

9 MR. REGALADO: I have gotten access to it.  
10 Registered. And, I'll be there -- I'm not going to  
11 come to the next meeting because I'll be there.

12 CHAIR PATHMAN: Okay.

13 MR. REGALADO: But, I've been able to register  
14 for the climate summit for local leaders as well as  
15 the TRD train.

16 I'm waiting to hear back for the sustainable  
17 innovation forum which is just about businesses in,  
18 kind of, leading this charge and economic engines,  
19 et cetera.

20 I -- What I wanted to ask you is if you had  
21 any other focus or anything specifically that you  
22 wanted me to look into, to reach out to the people  
23 over there.

24 CHAIR PATHMAN: Well, you know, while you're  
25 there if you meet people that you think are -- or

1 businesses that are interesting that we should  
2 invite here, that would be bring either ideas or  
3 technology to the committee or the city, in general  
4 -- the forums or anything that we --

5 MR. REGALADO: Okay.

6 CHAIR PATHMAN: -- might be a part of or  
7 co-host with someone or institutes would be one.

8 And then, two, I think the -- To me, whenever  
9 I go to these forums what is important is how do  
10 you organize the community?

11 You know, when we were in the Netherlands --  
12 Reinaldo and I -- one of things that I took back  
13 was that while it's not perfect and they don't all  
14 agree; but, there is a sense of the political  
15 government, the business and the community of  
16 citizens tend to work together. They realize that  
17 survivability depends on them working together to  
18 come up with solutions and they're not cheap.

19 If you go there and you see what they've done  
20 -- which doesn't necessarily correlate to sea level  
21 rise -- A lot of it is just their flooding issues;  
22 because, they're below sea level.

23 That's something we don't have here. We are  
24 very reactionary. We can't get people to, you  
25 know, agree on this issue. We can't find the

1 funding. Funding takes forever and then  
2 implementation and planning. All combined, you  
3 know, we might be talking about this and we already  
4 have a sea level problem.

5 So, if you come across someone there that, you  
6 know, has found a way to merge the political  
7 process, the citizens and the business community --  
8 And, we discussed that at our last meeting about  
9 the business community, kind of, being absent from  
10 the table right now. That would be great.

11 If you -- You know, --

12 MR. REGALADO: Okay.

13 CHAIR PATHMAN: -- what are they doing? What  
14 are they suggesting their government do?

15 That could be helpful.

16 And, I think the other areas that you touched  
17 on already -- I mean, obviously, you're going to  
18 get a plethora of information --

19 MR. REGALADO: Right.

20 CHAIR PATHMAN: -- that you can bring back and  
21 report to us, that I'm sure will be very  
22 interesting.

23 So that's great.

24 I'm sorry that, you know, Lillian left;  
25 because, maybe, she could have funded all of us

1 going.

2 But, that being said is there any other new  
3 business from the committee?

4 Okay. Doctor? Yes?

5 MR. WEIDNER: Stephen Weidner. My --

6 CHAIR PATHMAN: Dr. Stephen Weidner.

7 MR. WEIDNER: -- observations might be outside  
8 the purview of the committee. But, what is being  
9 done to stopped the bleeding? Obviously, the City  
10 of Miami is a huge -- Not only the city, but it's  
11 citizens are huge (indiscernible) and perhaps some  
12 of those major sources of emissions can be  
13 identified and mitigated.

14 MR. BORGES: Well, I have an idea about that  
15 because we --

16 CHAIR PATHMAN: Say your name again.

17 MR. BORGES: Reinaldo Borges. So, we had a  
18 lot of conversation about distinguishing between --  
19 you know, conversations about sustainability and  
20 living more responsibly with the resources that  
21 this planet has and also this idea of resiliency  
22 and planning ahead for something that is happening,  
23 whether we become the greenest planet, you know,  
24 ever or not, you know. Thermal expansion that is  
25 still happening. That heat that we put into the

1 ocean is still there for thousands of years is what  
2 the scientists tell me.

3 So, in a way -- you know, the conversation  
4 that we're trying to have, I think, through this  
5 committee has to do a lot more with resiliency than  
6 with living more sustainability.

7 I think that, you know, in a way, you know,  
8 maybe the metaphor is like, you know, when you're  
9 experiencing a flood, you know, you're not really  
10 worrying about what's creating the flood. But,  
11 you're creat -- You know, you just want to float  
12 your way through this flood. And, in a way, for  
13 me, resiliency planning is more about floating and  
14 survival than, you know, worrying about, you know,  
15 what's creating that flood, necessarily.

16 Now, I have to, sort of, be clear what that  
17 means. I mean, I care about the fact that we  
18 continue to warm up the planet. And, you know, in  
19 many ways, when you understand the way that we're  
20 warming up the planet, at the rate that we're  
21 warming up the planet, it is beyond the control of  
22 a lot of us in this room, for sure, you know. And,  
23 you know --

24 So, to me, you know, resiliency planning and  
25 thinking and design thinkings related to resiliency



1 is already so complex that every time in a  
2 committee, in a forum like this, we talk about, you  
3 know, using more green energy and using better  
4 technology for glazing.

5 I mean, all of the things that I try to do  
6 with my architecture, you know, I just, sort of,  
7 think, okay, we need to be focused and focus means  
8 that we need to target an issue that is already so  
9 complex.

10 So, I don't know. I don't know how we deal  
11 with the issue that we will continue to warm up the  
12 planet and the ocean will continue to expand and  
13 the ice melt is happening. And, you know, in  
14 Florida, we're actually the highest emitters of  
15 carbon, you know, because we drive the most of the  
16 fifty states. Florida is number one in -- you  
17 know.

18 So, I mean, people come here and just want to  
19 retire and move around. We're fragmented. We're  
20 not really cohesive in our planning. The State is  
21 very linear. I don't know how we solve that, you  
22 know.

23 So, --

24 MR. WEIDNER: I appreciate the committee's  
25 focus. But, I also -- as a doctor, know that you

1 have to stop the bleeding first.

2 MR. BORGES: Well, but what I'm saying is that  
3 the bleeding is already so extensive that, you  
4 know, I don't know how we as a committee on  
5 resiliency and sea level rise could even think that  
6 we're going to make a dent in stopping the  
7 bleeding, you know, through this effort, you know;  
8 because, our challenge is already significant  
9 enough. That's, sort of, my thought to your  
10 thoughts.

11 MR. WEIDNER: Is there another committee  
12 that's looking at those issues?

13 MR. BORGES: Well, the (indiscernible)  
14 sustainability. I mean Harvey Ruvin, who we've  
15 been talking about, has been talking about  
16 sustainability in this county forever. He's been,  
17 like, carrying that torch and -- with significant  
18 courage and I think we need to continue to do that.  
19 You know, I think that we need to set the example  
20 by becoming the most, you know, sustainable  
21 community on the planet. But, even that, in a way,  
22 is a distraction to protecting the community from  
23 the issue of sea level rise in some ways, it could  
24 be argued. Okay?

25 So, it's, kind of, like, a controversial issue

1 because, you know, I have some environmentalist  
2 friends that say, you know, if you do this to save  
3 the urban core of the community then you're going  
4 to do that to disrupt the ecology and the nature of  
5 the community and that becomes a difficult  
6 conversation between environmental protection and  
7 protecting the assets of the built environment that  
8 is the economic engine that makes this community  
9 function.

10 And, those are complicated issues that  
11 require, you know, people with other minds and  
12 other interests. So --

13 CHAIR PATHMAN: The answer to your question is  
14 that we are tasked specifically with dealing with  
15 sea level rise issues.

16 If the city hires a sustainability  
17 coordinator, which they're looking into, that is,  
18 certainly, something that should be brought up and  
19 discussed. Even Miami-Dade County recognized those  
20 issues many years ago when Harvey Ruvin was a  
21 commissioner, actually, and they passed a lot of  
22 legislation dealing with, you know, carbon  
23 emissions and so on.

24 But, it's certainly something that's, you  
25 know, not necessarily directly on our radar. But,

1 it's something that we are clearly all aware of;  
2 that it's an important issue.

3 I just don't think that this committee is  
4 tasked with that. And, again, we still don't have  
5 our mission statement clear and we'll find that  
6 out, hopefully, in the next thirty days. So, it's  
7 certainly something we could revisit depending upon  
8 what the commission's will is. But, I think that  
9 issue will be more topical when they hire an  
10 sustainability coordinator.

11 MR. WEIDNER: Thank you. Yes. Ajani?

12 MR. STEWART: The city does have an Office of  
13 Sustainable Initiative which is (indiscernible).  
14 We have done (indiscernible) with GHG, mitigation  
15 and things like that. So, that has happened. I  
16 mean we're going to look at (indiscernible). So,  
17 our focus right now has kind of migrated towards  
18 the climate change adaptation phase. Specifically,  
19 this hot button issue of sea level rise. But, we  
20 have and will continue to look at the issues that  
21 have been raised about stopping the bleeding and  
22 mitigating emissions, et cetera. So, I just wanted  
23 to (indiscernible).

24 And, if you want any information about what my  
25 office has done in the previous years and the stuff

1 that we may focus on in the future, feel free to  
2 give me a call.

3 CHAIR PATHMAN: Are there any other questions?  
4 Seeing none --

5 UNKNOWN SPEAKER: Behind you.

6 CHAIR PATHMAN: Oh. Was there? I'm sorry. I  
7 didn't mean to ignore you. That's the problem with  
8 sitting here and having people sitting behind you.

9 State your name, please.

10 MS. GORDON: Francine Gordon. You mentioned  
11 insurance.

12 CHAIR PATHMAN: Yes?

13 MS. GORDON: For the people that can't afford  
14 to get the extra flood insurance --

15 CHAIR PATHMAN: Flood insurance.

16 MS. GORDON: Yes. Is there another way of --  
17 route for them to go so they can protect themselves  
18 against flooding?

19 CHAIR PATHMAN: Well, currently, you can only  
20 buy a maximum of \$250,000 from the federal  
21 government depending upon the value of your home.

22 Eventually, the cost and the need to have  
23 greater insurance is going to be much more than it  
24 is today. So, you might today have only a risk of  
25 up to \$250,000. In the future, that risk is going

1 to double, triple and quadruple in many cases.

2 My home, I carry excess flood insurance;  
3 because, I don't feel \$250,000 is enough. And, if  
4 you carry a mortgage, the banks will impose this  
5 condition in the future; that you should have  
6 excess flood insurance if they feel their asset is  
7 at risk.

8 And then as the -- Depending upon the type of  
9 mortgage -- So, currently, it's relatively easy to  
10 get a thirty year mortgage. In the future, I think  
11 banks will pull back from that in high risk areas  
12 and not give thirty year mortgages. They're give  
13 you a thirty year amortization schedule. But, they  
14 won't give you the mortgage for thirty because they  
15 don't want to have their asset at risk.

16 But, they will require insurance.

17 So, right now, you can go into the secondary  
18 market, private insurance, and you can buy excess  
19 flood insurance and they give you a quote depending  
20 upon your area, the risk and so on.

21 MS. GORDON: Okay.

22 MR. TASHIRO: There are also -- Stephanie  
23 Tashiro. There are also some FEMA programs  
24 available for people that experience repetitive  
25 flooding. So there are some stipulations. One of

1           them is that someone has filed four or more flood  
2           insurance claims and then they're eligible to  
3           receive one hundred percent flooding for elevation  
4           of their home. So, they have to be a homeowner.  
5           They have to meet the flood plan mandate.

6                     And then, there are also programs available  
7           for people that don't meet that. But, they're not  
8           likely to be funded because there are very limited  
9           dollars now.

10                    But, the people that have experienced  
11           repetitive loss (indiscernible) repetitive loss and  
12           repetitive loss is two or more -- flood insurance  
13           claims then they are eligible to apply for funding  
14           to elevate their home and that's (indiscernible).

15                    CHAIR PATHMAN: It's a long process, in other  
16           words.

17                    MS. GORDON: Uh-huh.

18                    VICE CHAIR CALE: Right. Well -- And so,  
19           yeah, there is some money involved because if you  
20           don't meet the severe repetitive loss standards  
21           then you get less and less funding for projects so  
22           you have to put more and more funding toward it.

23                    But, it's still an option.

24                    CHAIR PATHMAN: In some areas, like after  
25           Sandy, states are requiring -- you know, looking at

1           what they call planned retreat. They don't let you  
2           rebuild. You can't rebuild because the risk is too  
3           high or you can't get insurance.

4                     It's not happening here yet in South Florida.  
5           But, it's something that is, certainly, on the  
6           radar screen for communities and all insurance --  
7           you know, the insurance industry, which would  
8           alleviate the problem because you wouldn't be able  
9           to rebuild your home. You have to move and live  
10          somewhere else.

11                    I mean all of these things are things that,  
12          you know, we have to deal with as a committee.  
13          But, I think it was Albert or something that said,  
14          you know, it's not doom and gloom. There are a lot  
15          of things that are going to, you know, create  
16          economic opportunity and jobs and stability for the  
17          future economically. But, in all of the studies  
18          I've read Miami is still ground zero for economic  
19          impact due to sea level rise and it's something we  
20          have to start dealing with.

21                    Albert, it would be a meeting if we didn't  
22          close with you. So, Albert --

23                    MR. A. GOMEZ: Albert Gomez. I wanted to give  
24          you one point which is something that has gained  
25          traction. It's Commissioner Xavier Suarez



1 (indiscernible) between having a commissioner here  
2 -- his son has been, you know, in e-mail dialogue  
3 with me. I've met with him already. He's  
4 interested in supporting it. I've exposed him to  
5 (indiscernible), as well. He's aware of it and he  
6 likes the idea. He said it to me at a commission  
7 meeting before he went to the back and said I like  
8 the idea.

9 So, the presentation was the following: The  
10 nature of conservancy work with (indiscernible),  
11 the Philadelphia based company that I'm  
12 collaborating with. They're the ones that  
13 developed the mapping system for the climate  
14 resilience in 2.0 mapping tools that they have.

15 That organization has come forward. They have  
16 an application called Open Tree Map. Okay? It's  
17 for mapping tree inventories in urban centers.

18 They also have integrated carbon sequestration  
19 tools, energy saving, water saving modules. It all  
20 calculates it just by loading it up.

21 Cities across the country are doing this right  
22 now. It's citizen science. They plug it in. It's  
23 about a ninety percent accuracy rate without even  
24 (indiscernible). Okay? So, it's very, very solid.

25 The city does not have inventory of their

1 current trees.

2 I believe there was a preliminary inventory  
3 done, initially, when Glenn came on. But, it's --  
4 I don't know if we have access to that data. But  
5 it's --

6 Since it's Miami-Dade County they like the  
7 idea of engaging the 311. The 311 has four million  
8 hits so far on their app and most of it is my dog  
9 is lost or the neighbor is loud with the music or  
10 can you tell the eyesore of the neighbor to paint  
11 his yard and they want to intelligize the 311 a  
12 little more and also engage the public, not on this  
13 -- again, that doom and gloom; but, a positive  
14 reinforcement for the apps.

15 So, they -- They -- I suggested bringing the  
16 open tree map as an offer for the 311 augment and  
17 it's an easy API switch. It's just coding. It  
18 fits right in. They wouldn't have to do any  
19 modification. It would be very little. And, it's  
20 already funded. They're already looking to do it  
21 anyway.

22 MR. BORGES: So how does this affect sea level  
23 rise and resiliency?

24 MR. A. GOMEZ: So, by engaging the public on  
25 something like tree --

1 MR. BORGES: Tree inventories.

2 MR. A. GOMEZ: -- inventories, getting  
3 information on their trees, finding out the value  
4 of that tree and then getting informed on that;  
5 now, you have an outreach on the public. The  
6 public is reaching out to the city on something  
7 positive; brining assets to bear, evaluating those  
8 assets, getting cash inventory from those assets  
9 because now when you have a voluntary market  
10 available to buy the value of the trees allocated  
11 in Miami-Dade and the City of Miami, you have the  
12 ability to put a value to that, which the citizen  
13 populates and brings forth.

14 At the point that the king tides come through  
15 or we have the next flooding incident you can start  
16 to use the 311 app much more actively. Not the  
17 people that know about the 311 app; but, everyone  
18 that's already using it for the trees and they're  
19 already aware of using it for putting -- taking  
20 pictures of the trees and augmenting the positive  
21 use of the 311.

22 Now that they -- When there's an incident they  
23 actually will be more adept to the system and would  
24 be more aware of how to utilize it and more people  
25 will be migrating data onto the system.

1           Now, that's scary from an administrative  
2           standpoint --

3           (Thereupon, a conversation was taking place in the  
4           background and was not transcribed.)

5           MR. A. GOMEZ: -- because it taxes the system.  
6           But, the reality is you guys need to start  
7           addressing taxing the system.

8           So my goal is -- I'm already moving forward  
9           with that. So, I'm letting you know, the City of  
10          Miami, I'd like to engage the City of Miami to  
11          bring their tree inventories into it so it's one  
12          holistic system.

13          But, my whole goal to do that is to create  
14          some sort of gains down here so that we can bring  
15          forward a panel of subject matter experts. We can  
16          bring all of the EMs together in a --

17          CHAIR PATHMAN: Albert, let me just interrupt.

18          MR. A. GOMEZ: -- and we do a serious gains  
19          effort where we can trial the system out for a  
20          scenario based situational analysis of a CAT 4  
21          storm with sea level rise or just, let's say, a  
22          glacier falls in the water and we have, all of a  
23          sudden, -- which all scientists are claiming could  
24          happen -- We could have a rapid jump in sea level.

25          So, to say, oh, let's be optimistic -- and I

1 am the optimist, always -- But, at the same light,  
2 we have to test the system. So, I think that part  
3 of the policies that you guys should bring forward  
4 is about putting some sort of serious gains  
5 simulations together with the management and  
6 governance so that they can qualify if they're even  
7 ready for something like this to happen.

8 And, I'm afraid that if it does go down we're  
9 not going to be ready. Most cities aren't when  
10 they do these disaster scenarios and I know you  
11 guys have done certain scenarios. But, only for  
12 hurricanes and not, necessarily, with integrated  
13 sea levels. So, it's just a thought.

14 CHAIR PATHMAN: I think it presents  
15 interesting information. But, I think that, Ajani,  
16 it's more for your department to maybe talk to  
17 Albert and see if it's something the city, you  
18 know, wishes to look into and then report back to  
19 us and see if it's something that this committee  
20 should entertain. Okay?

21 MR. STEWART: Okay.

22 CHAIR PATHMAN: So, thank you, Albert. Yes?  
23 Your name please?

24 MS. JOHNSON: Joyce Johnson. You mentioned  
25 Friday night and you were going to notify us. Does

1 that mean me, too; or, just about the event?

2 MR. STEWART: Well, the event is happening.

3 The only --

4 CHAIR PATHMAN: You can watch it.

5 MR. STEWART: Yeah.

6 MS. JOHNSON: Okay.

7 CHAIR PATHMAN: It's like they invited seventy  
8 people, that's it. It's cut off.

9 MS. JOHNSON: Oh, okay.

10 CHAIR PATHMAN: And then there is something  
11 that FIU is hosting.

12 MS. JOHNSON: Okay.

13 CHAIR PATHMAN: I may be one of the panelists  
14 and --

15 MS. JOHNSON: I'll turn it on.

16 CHAIR PATHMAN: -- I'll report back. But,  
17 yeah, --

18 MS. JOHNSON: Hopefully, there's a movie  
19 (indiscernible) tonight; South Florida Rising Seas  
20 Impact at --

21 MR. STEWART: Miami Beach (indiscernible).

22 MS. JOHNSON: Miami Beach -- Thank you so  
23 much. In case you didn't know, Harvey Ruvin is one  
24 of the panel members.

25 CHAIR PATHMAN: Harvey is busy.

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MS. JOHNSON: Yeah.

CHAIR PATHMAN: I've known Harvey forever.

Thank you very much.

Is there anybody else?

Seeing none, I would like to make a motion to adjourn.

UNKNOWN SPEAKER: Second.

CHAIR PATHMAN: All of those in favor?

(Thereupon, responses were in the affirmative.)

CHAIR PATHMAN: Okay. The motion passes. Thank you.

(Thereupon, the proceeding was concluded.)

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CERTIFICATE OF COURT REPORTER

THE STATE OF FLORIDA:

:ss.

COUNTY OF BROWARD :

I, NICK BRUENS, certify that I was authorized to and did transcribe the foregoing recorded events.

I do further certify that the foregoing is a true and accurate transcript of the events as provided to me on the CD taken at the time, place and the date hereinabove set forth.

I do further certify that I am not an attorney or counsel for any of the parties, nor related to any of the parties, nor financially interested in the action.

Dated this 8th day of December, 2015

Nick Bruens

Typist

NBR/IMG



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