

CITY OF MIAMI

SEA LEVEL RISE COMMITTEE

City of Miami City Hall
Commission Chambers
3500 Pan American Drive
Miami, Florida 33133

February 8th, 2016
6:14 p.m. - 8:26 p.m.

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APPEARANCES :

COMMITTEE MEMBERS :

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

CITY STAFF :

- AJANI STEWART, LIAISON
- MATTHEW S. HABER, ASSISTANT CITY ATTORNEY
- NZERIBE IHEKWABA, ASSISTANT CITY MANAGER
- STEPHANIE TAHSIOR, HAZARAD MITIGATION/DISASTER
RECOVERY SPECIALIST
- RYAN SHEDD, PLANNER I

ALSO PRESENT :

- JANE GILBERT
- CRAIG BARNELL
- MAYOR CINDY LERNER
- NICOLE HEFTY

1 THEREUPON:

2 (Meeting Commences.)

3 CHAIR PATHMAN: Good evening, ladies and
4 gentlemen.

5 This is the Miami -- City of Miami Sea Level
6 Rise Committee Meeting.

7 My name is Wayne Pathman. I'm the Chairman.
8 I am also the Chairman-Elect for the City of Miami
9 Beach Chamber of Commerce and I am an attorney
10 practicing at Pathman Lewis, where I'm the managing
11 partner, specializing in land use and zoning
12 matters as well as environmental.

13 I'm going to introduce the rest of the board
14 starting with to left. Jose?

15 MR. REGALADO: (Indiscernible).

16 CHAIR PATHMAN: Turn your -- Hit the white
17 button there.

18 MR. REGALADO: Good evening. My name is Jose
19 Regalado. I was appointed by Wifredo Gort. I'm an
20 underwater photographer as well as a former adviser
21 to the Mayor.

22 MR. BORGES: Good evening. Reinaldo Borges.
23 I'm an Architect with a practice here in Miami, a
24 firm by the name of Borges and Associates.

25 I'm also Chairman of the Sea Level Rise Task

1 Force at the American Institute of Architects and
2 also participate with Wayne at the Chamber of
3 Commerce in Miami Beach as a Board of Governor
4 member.

5 Thank you.

6 VICE CHAIR CALE: Hello. I'm Tabitha Cale.
7 I'm an Everglades Policy Associate with Audubon of
8 Florida and also have some background -- academic
9 expertise in climate change policy.

10 MR. GOMEZ: My name is Pete Gomez. I'm an
11 Assistant Fire Chief and I am the City's Emergency
12 Manager.

13 CHAIR PATHMAN: Before we get into our agenda
14 I'd just like to thank everybody for being here
15 this evening.

16 You know, we feel that this is a very
17 important committee; especially, about the future
18 of the City of Miami and dealing with issues
19 related to Sea Level Rise and flooding.

20 So, thank you, again, for being here.

21 Our first order of business is to adopt the
22 minutes from last month, December 17, 2015.

23 Does anybody have any discussion or concern
24 about the minutes?

25 (Thereupon, no responses were heard.)

1 CHAIR PATHMAN: Seeing none, would someone
2 make a motion that we adopt the minutes?

3 MR. GOMEZ: I'd like to make a motion to
4 adopt.

5 MR. BORGES: I second it.

6 CHAIR PATHMAN: Okay. All of those in favor
7 say aye?

8 (Thereupon, responses were heard in the
9 affirmative.)

10 CHAIR PATHMAN: Any opposed?

11 (Thereupon, no responses were heard.)

12 CHAIR PATHMAN: Any abstentions?

13 (Thereupon, no responses were heard.)

14 CHAIR PATHMAN: Seeing none, the minutes are
15 adopted.

16 Okay. Staff, if you could just introduce
17 yourselves, too, please, before you give the
18 report?

19 MR. AJANI: Good evening; Ajani Stewart,
20 Environmental Programs Manager, City's Office of
21 Sustainable Initiatives.

22 MR. HABER: Matthew Haber, Office of City
23 Attorney, Assistant City Attorney.

24 MS. TASHIRO: (Indiscernible).

25 CHAIR PATHMAN: Come to the podium, Stephanie.

1 Always a pleasure to see you. Thank you for
2 always being here.

3 MS. TASHIRO: Thank you. Stephanie Tashiro,
4 Hazard Mitigation and Disaster Recovery Specialist
5 in the Office of Emergency Management.

6 MR. STEWART: Mr. Chair, she'll be giving the
7 update on the local mitigation strategy funding --
8 project funding.

9 CHAIR PATHMAN: Okay. Do you want to go ahead
10 Stephanie since you're up there?

11 MS. TASHIRO: Yeah.

12 CHAIR PATHMAN: Why don't you go ahead and
13 we'll take that one first.

14 MS. TASHIRO: As a recap, we had \$350,000 to
15 put toward mitigation projects. We had a
16 mitigation committee of multiple departments in the
17 City vote on how the funds should be spent.

18 And, five projects -- four projects are going
19 to be fully funded and one will be partially
20 funded.

21 So, the four projects that will be fully
22 funded are a generator for the city's communication
23 systems and that will be located at the city's fire
24 garage.

25 A project to protect vital city records. So,

1 they were records that were stored here that were
2 moved due to flooding concerns. And, the project
3 will fund the -- having those records scanned so
4 that we have a back up of city records. And, they
5 will also be sorted.

6 A project to require portable pumps and
7 generators for the Public Works Department.

8 And, a project to purchase a generator for the
9 city's back up 911 center.

10 The project that will be partially funded are
11 hurricane window barriers for Park and Recreation
12 buildings.

13 They are checking now to see if they can use
14 the partial funding and if they cannot the next
15 project that would be funded would -- partially
16 funded would be a mitigation and resiliency
17 initiative for historic neighborhoods in the city.

18 CHAIR PATHMAN: Will those reports be
19 available to the committee in the future? Will we
20 be able to get copies of those?

21 MS. TASHIRO: Yes.

22 CHAIR PATHMAN: Can you provide us copies as
23 they --

24 MS. TASHIRO: Yes.

25 CHAIR PATHMAN: -- come due?

1 MS. TASHIRO: Yes.

2 CHAIR PATHMAN: Okay. Great.

3 Does anybody have any questions for Stephanie
4 concerning funding?

5 I know some of us are passionate about
6 funding.

7 No? No questions.

8 Stephanie, it's probably not, maybe, within
9 your purview; but, you know, some time ago we
10 passed a resolution concerning the mapping, you
11 know, and trying to figure out the areas that are
12 most affected.

13 Is that something the city is already doing?
14 Is there funding for it? Is that something we can
15 request?

16 MS. TASHIRO: We do --

17 MR. GOMEZ: Can I say something?

18 And that what going to be part of what I was
19 going to speak about.

20 We -- I had a meeting with -- (Indiscernible)
21 scheduled a meeting with a lot of the directors of
22 that were going to be involved with this and that
23 was one of the areas that's going to be discussed
24 and it's going to be tied to the Regional Storm
25 Water Master Plan that our CITP (Capital

1 Improvements and Transportation Program) is
2 currently engaged in and is going to look -- try to
3 get more funding for.

4 But, in speaking to it, yes, there are some
5 efforts right now to incorporate all of the
6 mapping. But, you can speak to the rest of
7 Stephanie, if you want.

8 MS. TASHIRO: We do have --

9 CHAIR PATHMAN: Thanks, Pete.

10 MS. TASHIRO: We do have several employees in
11 the city that work on GIS (Geographic Information
12 System) mapping. And so, we do -- We have maps and
13 we create maps as we need them.

14 And then, the County has a very good -- has
15 very good maps, as well.

16 In terms -- I know the mapping that you're
17 talking about from previous meetings and in terms
18 of funding that's something that we could look into
19 if we need to fund a project like that. We could
20 apply for grants and things like that. But, there
21 is no readily available funding at this time.

22 CHAIR PATHMAN: Pete, could you, maybe, work
23 with Stephanie and see how we can go about it.

24 Because, if you recall, at one of our first
25 meetings that was our first order of business -- is

1 to figure out what areas of the city are most
2 affected.

3 How do we go about planning or doing anything
4 else here until we know what areas are affected?

5 And, that was one of your big concerns, also,
6 for emergency services.

7 MS. TASHIRO: At this point in time, we use
8 the FEMA (Federal Emergency Management Agency)
9 flood maps, the County's storm surge maps and the
10 CITP Storm Water Master Plan maps.

11 And, all of those identify different types of
12 flooding.

13 The CITP maps identify the basins and the
14 sub-basins.

15 So, I think that a presentation by them would
16 be better to go over that instead of myself. I've
17 just seen it. But, I'm not an expert in it.

18 CHAIR PATHMAN: When you say them, who do you
19 mean?

20 MS. TASHIRO: CITP.

21 MR. GOMEZ: CITP.

22 MS. TASHIRO: Capitol Improvement and
23 Transportation.

24 CHAIR PATHMAN: Okay.

25 MR. GOMEZ: The Director, Jeovanny Rodriguez,

1 has offered to speak to this committee whenever we
2 want to have him.

3 So, Ajani, if you can, maybe, we can invite
4 him to the next meeting and have him come out and
5 give a presentation on the Master Plan and speak to
6 mapping that's associated with the Master Plan.

7 And, by the way, we still have access to any
8 department that you want out here. The building
9 official has made himself available. If we want to
10 invite him, he'll speak to us.

11 We've spoken about Miami 21 a bunch of times
12 and he would be willing and happy to come out here
13 and speak to the committee.

14 CHAIR PATHMAN: Ajani has been arranging those
15 meetings. I've been trying to meet with the
16 department heads first and then invite them to our
17 committee meetings.

18 So Ajani, if you could look into that;
19 because, I'd like to, at least, try to move the
20 mapping idea forward and have this committee take a
21 look at it and, you know, kind of follow through
22 with our resolution that we passed last year.

23 MR. STEWART: Okay.

24 CHAIR PATHMAN: Okay. But Pete, if you could
25 also, you know, work with that issue I'd appreciate

1 it also.

2 MR. GOMEZ: Okay.

3 CHAIR PATHMAN: Thank you.

4 MS. TASHIRO: Thank you.

5 MR. REGALADO: Mr. Chair, just one question?

6 CHAIR PATHMAN: Jose, yes?

7 MR. REGALADO: Yeah. For the mitigation is
8 that just for historical neighborhoods?

9 MS. TASHIRO: No. There is one project that's
10 designated for historical neighborhoods that could,
11 potentially, be funded by this.

12 But, at this point in time, it's for the whole
13 city. It -- The way we look at the project it's
14 just for the whole city.

15 MR. REGALADO: Right. But, when you're saying
16 that it could be partially funded --

17 MS. TASHIRO: Oh, right.

18 MR. REGALADO: -- for the hurricane window
19 barriers in parks or for the mitigation --

20 MS. TASHIRO: So, if parks can use -- Because,
21 the parks project is one hundred and -- I'm sorry.
22 It's \$250,000 that was needed to complete --

23 MR. REGALADO: Uh-huh?

24 MS. TASHIRO: -- the full project and we only
25 have \$16,000 available.

1 So, if they can it to do, maybe, a few windows
2 then that's something that they would do.

3 But, if they can't then we will try to do it
4 for the next project, which is the historic
5 neighborhoods project.

6 MR. REGALADO: And how much is that?

7 MS. TASHIRO: That project would be \$139,500.
8 But again, we would just be able to offer the
9 \$16,000.

10 MR. REGALADO: Okay. Thank you.

11 MS. TASHIRO: Uh-huh.

12 MR. GOMEZ: A quick informational aspect of
13 that \$350,000, that was an effort that we've been
14 brainstorming to try to get mitigation projects for
15 the city for years. And, obviously, the economic
16 climate was not conducive to trying to get that
17 type of budget.

18 So, we reached out to the manager. The manager
19 gave us a small budget to be able to do these
20 mitigation efforts and that's what we have right
21 there.

22 So, we will continue to move forward every
23 year trying to get more funding to -- Because,
24 those came from -- directly from our local
25 mitigation strategy, from that plan. And, that's

1 where those projects are coming from.

2 So, we have a lot.

3 Stephanie, how many would say; a hundred, a
4 hundred and fifty projects?

5 MS. TASHIRO: (Indiscernible).

6 MR. GOMEZ: Yeah. So, we'll try to fund as
7 many as we can moving forward. Again, depending on
8 the economic climate.

9 CHAIR PATHMAN: Okay. Very good. Ajani, do
10 you want to --

11 Oh, Planning and Zoning is here. Okay, good.
12 Very good.

13 Just please introduce yourself.

14 MR. SHEDD: Good evening. My name is Ryan
15 Shedd with the Department of Planning and Zonine.

16 CHAIR PATHMAN: Good to see you again.

17 MR. SHEDD: Me, too. And just a quick heads
18 up. I'm one of those GIS folks from the city. So,
19 we can talk about that.

20 But, you know, the planning department -- you
21 know, we don't really a lot with CITP's
22 information. We do, you know, some of the other
23 side. But, you know, of course, we all work really
24 well together. So, we'll get going with that.

25 And then another quick note in reference to

1 historic neighborhoods and historic resources, we
2 are going to be having -- you already mentioned --
3 you know, been discussing planning and zoning
4 topics.

5 In our department we have comp planning, which
6 I'm a part of that division. We also have urban
7 design and land development which covers Miami 21
8 and our zoning code. We also have historic
9 preservation and environmental resources.

10 And, all five division have folks that want to
11 be a part of the conversation.

12 And so, I think we've talked about, you know,
13 just starting with comp planning and Miami 21 over
14 the next couple of months.

15 But, I know historic preservation and
16 environmental resources really want to be a part of
17 the conversation, too.

18 So, they are ready and on board for that.

19 But, just jumping ahead to March. We are
20 getting together to start to talk about -- as I
21 mentioned before, the update to our comprehensive
22 plan, which is very time sensitive.

23 And so, we've been talking about addressing
24 our comprehensive plan in Miami 21.

25 Luckily, Miami 21, we have a lot more local

1 leverage. We have leverage over our comp plan,
2 too. But, it's easier to get into Miami 21 on our
3 own time line. The comp plan has some deadlines
4 this year.

5 So, we want to bring that up to you guys right
6 in March and talk about some policy
7 recommendations.

8 We want to start to look at some
9 recommendations we can make on a district-wide or
10 neighborhood scale; because, one of the most
11 important things -- You know, we can address
12 certain assets. But, if we don't have a plan for
13 actual neighborhoods and districts then we're going
14 to have little, you know, islands and things within
15 a whole flooded plain.

16 So, that's something that we want to start
17 looking at. And so, we'll bring that forward in
18 March.

19 CHAIR PATHMAN: With regards to what you were
20 saying with regards to the other departments and
21 coming and presenting; --

22 MR. SHEDD: Uh-huh?

23 CHAIR PATHMAN: -- is it possible to have some
24 opportunity for all of you, because you're all here
25 at the city, to put something together, all of us,

1 because, you know, we have to operate here at the
2 committee and we're not going to have another
3 workshop, probably, for a month or two.

4 But, it would great if it was a joint
5 presentation instead of everybody, kind of, trying
6 to overlap on the issues.

7 And then, you could present it to Ajani or
8 Matt or both and then we can put it in our agenda
9 and plan that to be a good portion of our meeting;
10 because, that's really where we're trying to go
11 with all of this.

12 DR. IHEKWABA: (Indiscernible).

13 CHAIR PATHMAN: Manager?

14 DR. IHEKWABA: Good evening. I'm Dr. Nzeribe
15 Ihekwaba, Assistant City Manager.

16 Several months ago, I had been to this
17 committee and I made an offer to you. Whatever
18 results you need just let me know or my office,
19 through Ajani Stewart, and we'll you provide you
20 with that research.

21 If it's the wish of this committee to have all
22 the department directors prepare a joint report for
23 you from the perspective of their different
24 purviews we'll do that.

25 We'll ask that you give us time so that we can

1 put it together and send it to you.

2 CHAIR PATHMAN: That would be very helpful. I
3 mean, you know, one of the things we're trying to
4 do up here is work with you, you know, and figure
5 out what direction the city wants to go and then
6 how we can all work together. And then, there's a
7 more global of working with other cities in the
8 county as well and, maybe, one day the State if we
9 have a new Governor.

10 But what we'd like to do is figure out how we
11 can do what you just said and then have one meeting
12 when you're ready that we can discuss all of those
13 issues.

14 DR. IHEKWABA: Yes. I think we've already
15 been pro-active in terms of having a meeting with
16 Chief Gomez where I had all of the department
17 directors that are actually related or connected
18 with your mandate and we're going to articulate or
19 list out all the current policies; pro-active
20 regulations that we intend to implement going
21 forward and will pass it through Chief Gomez to
22 present to you, one of which is currently the city
23 has a Storm Water Master Plan that was prepared, I
24 believe, four years ago and we intend to update
25 that through the retention of a new consultant to

1 provide us something that is more realistic, that
2 is tied to the expectations and projections of sea
3 level rise.

4 CHAIR PATHMAN: That would be very helpful --

5 DR. IHEKWABA: Okay.

6 CHAIR PATHMAN: -- if you could that. Great.

7 DR. IHEKWABA: So again, like I said, if you
8 need additional resources just let the manager's
9 officer be aware.

10 CHAIR PATHMAN: You may regret that. But, we
11 will. We will take you up on it.

12 DR. IHEKWABA: We are at your service, sir.

13 CHAIR PATHMAN: Thank you very much. Thank
14 you again, Mr. Assistant City Manager.

15 Reinaldo, did you have any questions? I know
16 you're going to do your report in a minute. But,
17 did you have any questions at this time?

18 MR. BORGES: About the report?

19 CHAIR PATHMAN: Yeah.

20 MR. BORGES: No. No.

21 CHAIR PATHMAN: Okay. Can you stick around?
22 I know you (indiscernible); because, Reinaldo is
23 going to do a report on planning and zoning and
24 we'd like if both of you could stay. Okay?

25 The update on the 100 Resilient Cities?

1 MR. STEWART: Yes, Mr. Chair. A brief update
2 on the 100 Resilient Cities Grant.

3 So, as you know, we've done a co-application
4 with the City of Miami Beach and Miami-Dade County
5 for the Rockefeller Foundation funded 100 Resilient
6 Cities Program.

7 There is a meeting of the three local
8 mayors -- Well, a proposed meeting of the three
9 local mayors, on February 19th, as part of the
10 evaluation process. They will be meeting with the
11 100 Resilient Cities team.

12 So, I think, everyone is trying to pull that
13 together and that will happen later this month.

14 We've gotten some feedback that our
15 application has been positively viewed and
16 positively received; but, nothing concrete yet.

17 And, we expect to hear something more official
18 by mid-April; around there.

19 MS. GILBERT: End of April.

20 MR. STEWART: End of April. So, that's --

21 CHAIR PATHMAN: Okay. Is there any input,
22 Ajani, that you need from the committee or anything
23 you'd like the committee to address?

24 MR. STEWART: Uhm -- Maybe I could introduce
25 someone who has been representing the Miami

1 Foundation; has been working this. She may have a
2 better idea of some input that we could have from
3 this committee or is that the application is --

4 MS. GILBERT: (Indiscernible).

5 CHAIR PATHMAN: Jane, come (indiscernible)
6 would you --

7 MR. STEWART: Yeah.

8 CHAIR PATHMAN: -- and just introduce
9 yourself?

10 MS. GILBERT: Sure. Jane Gilbert, working
11 with the Miami Foundation on their Sea Level
12 Initiative.

13 I think we'll know more at the end of April.
14 The 100 Resilient Cities, as you may know, is a
15 comprehensive look at the city's resilience.

16 So, sea level rise was the top stressor
17 indicated in that application; but, there was also
18 transportation, pronounced poverty, affordable
19 housing, as well as top shocks of hurricanes and
20 flooding and others.

21 So, it will be an integrated plan and I think
22 that's all positive.

23 You're already talking about getting the
24 departments to talk to each other and have an
25 integrated approach to this.

1 So, I think -- I think it will be -- It will
2 -- It will achieve that integration.

3 But, we'll know more in April.

4 CHAIR PATHMAN: Is there anything else that
5 you could think of that we, as a committee, can
6 take up that would help or do you think we're on
7 the right track?

8 MS. GILBERT: I think you're on the right
9 track. You're absolutely on the right track.

10 CHAIR PATHMAN: Okay.

11 MS. GILBERT: Yeah.

12 CHAIR PATHMAN: Very good. Thank you. Okay.

13 And, who is going to give the summary with
14 regards to the recent city administration meeting?

15 UNKNOWN SPEAKER: Pete Gomez.

16 CHAIR PATHMAN: Oh, Peter.

17 MR. GOMEZ: Yeah. That was -- I reached out
18 to the Assistant City Manager so that we could have
19 a discussion amongst some of the directors that
20 were going to be involved with sea level rise.

21 So, we had a meeting. It went relatively well
22 and some of the things that were discussed --

23 And, I'll give you a quick briefing on it.

24 The approaches to it -- We discussed treating
25 sea level rise at the shoreline, treating sea level

1 rise by infrastructure changes and treating sea
2 level rise by running away. That was the last part
3 that we discussed.

4 Then, some of the recommendations for
5 addressing the sea level rise --

6 And, again, it was a very first time meeting
7 with all of the directors. So, it was just getting
8 a feel for it and getting a feel for how everybody
9 felt. We wanted to start getting everybody
10 involved in the sea level rise discussion.

11 So, one of the major things that was discussed
12 -- and there was a lot of discussion on it and I
13 believe this committee feels the same way -- was
14 that sea level needs to be addressed on a regional
15 level with the Storm Water Master Plan; because,
16 it's not a City of Miami issue.

17 The sewer systems that need to be upgrade,
18 obviously, the City of Miami can't do that on its
19 own. That's got to be -- That's got to come from
20 the county and, maybe, even federal assistance to
21 do that.

22 We discussed the Storm Water Master Plan,
23 about meeting to update it and like the Assistant
24 Manager says we -- the city has made a commitment
25 to CITP to get that done.

1 Then, to amend the Capital Plan to account for
2 storm water as an issue. That's currently
3 underway.

4 Then, we also discussed having the GIS
5 component involved in the Storm Water Master Plan
6 and in the Comprehensive Plan, also.

7 There was some discussion about sea wall
8 restorations and modifications. There was, you
9 know, a lot of discussion; the pros and cons with
10 that being the answer.

11 We also discussed the amount of pump stations
12 and injection wells within the city and also
13 placing conditions on developers to consider
14 adopting similar plans to address the drainage
15 issue.

16 We also discussed infrastructure hardening.

17 One of the other areas that was discussed a
18 lot was the validation of the science behind the
19 sea level rise to best figure out how to best
20 utilized any funds that are going to be addressed
21 to the sea level rising.

22 And, we also addressed discussing looking into
23 Miami 21, consider what you have discussed about
24 sacrificial first floor and sacrificial streets.

25 And then, the other issue that nobody had an

1 answer to was how much money is going to be
2 required to address the sea level rise issues.

3 CHAIR PATHMAN: A lot.

4 MR. GOMEZ: Exactly. So, we have the budget
5 director and he looked at us right away and he
6 said, what's it going to cost? Nobody had that
7 answer.

8 So, the storm water plan, as far as funding,
9 there was a brief discussion on how much it would
10 cost to fund that Storm Water Master Plan and the
11 city is in the process, actually right now, of
12 evaluating an acquisition asset management software
13 which everybody there, pretty much, felt that it
14 would assist in being able to manage and keeping
15 track of the sea level rise.

16 It's an on-going project that's currently
17 taking place within our IT Department and everybody
18 felt that would be a good movement to help this
19 committee in managing all of the information that's
20 out there; including all of the assets that we have
21 to be able to assist with.

22 CHAIR PATHMAN: Was there any time frame given
23 for the responses to all of those issues?

24 MR. GOMEZ: No. Again, it was a very
25 preliminary meeting. It was just getting the

1 information out there, getting the idea out there
2 and I'm sure that the Assistant City Manager is
3 planning to have a follow-up meeting.

4 Again, we also opened it up to everybody that
5 was there in that group, which is the building
6 director, public works, GSA (General Services
7 Administration), CITP, myself. They were all
8 there. So, they've all been invited here.

9 So, eventually, you have to start putting, you
10 know, boots on the ground to get these kind of
11 things done and dates associated with it.

12 CHAIR PATHMAN: Do you know if any report is
13 going to be created as a result of the meeting?

14 MR. GOMEZ: That wasn't discussed in that
15 meeting. But, I'm sure if it's the will of this
16 committee -- I'm sure we could put together
17 something.

18 CHAIR PATHMAN: If you could find if there is
19 a report and we could get a copy that would be
20 great. It would help us.

21 MR. GOMEZ: Well, there wasn't --

22 CHAIR PATHMAN: (Indiscernible).

23 MR. GOMEZ: -- a report --

24 CHAIR PATHMAN: There wasn't any transcrib --

25 MR. GOMEZ: No. The --

1 CHAIR PATHMAN: Okay.

2 MR. GOMEZ: There were minutes taken and
3 that's what I'm -- I'm reading the minutes --

4 CHAIR PATHMAN: Oh, okay.

5 MR. GOMEZ: -- from that meeting.

6 Again, very preliminary meeting. It's getting
7 everybody engaged into the sea level rise talk
8 right now.

9 CHAIR PATHMAN: Okay. Thank you very much.

10 We'll now begin our committee reports. Excuse
11 me.

12 We've got the SLR (Sea Level Rise) Committee
13 annual report update.

14 Ajani, do you want to take that before we get
15 into committee?

16 MR. STEWART: Yeah. Just another brief
17 update.

18 So that report was submitted on January 15th
19 to the City Manager.

20 We haven't received any feedback. However, We
21 probably have a suggestion that this board follows
22 up with the city commission to start engaging them
23 on the suggestions in this report.

24 CHAIR PATHMAN: Okay. Can you, just also,
25 give us a quick update on our terms; what we

1 discussed?

2 MR. STEWART: Okay.

3 CHAIR PATHMAN: (Indiscernible) everybody --
4 Or, Matt, if you could do that so everybody can
5 understand that we will be, I guess, going forward.

6 MR. HABER: So, one of the questions that came
7 out of the annual report had to do with the tenure
8 of the current members of the Sea Level Rise
9 Committee.

10 As you all know, this committee was organized
11 pursuant to a resolution passed by the city
12 commission.

13 Part of the recommendations were to replace
14 that resolution with an ordinance that would also
15 increase the term from one year to two years.

16 Obviously, again, that requires an action of
17 the city commission and someone to sponsor such
18 legislation.

19 But, in the interim, you know, assuming that
20 no one appoints a replacement for any of you when
21 your terms expires you would simply continue to
22 serve.

23 So, for instance -- I believe Wayne's term is
24 supposed to end in April. If, you know, the
25 individual who appointed Wayne does not appoint a

1 replacement you will simply continue to serve until
2 a new member is found or a new member is appointed.

3 So, it's not like the moment that your term is
4 up you're off the committee. It's -- You're
5 serving until the commission decides to update the
6 membership of this committee.

7 CHAIR PATHMAN: So, -- And, I understand
8 everything you said. But, for clarification of all
9 of the people on the committee; technically, all of
10 our terms are up some time by mid-Judge.

11 MR. HABER: Uh-huh.

12 CHAIR PATHMAN: So we no longer would have a
13 standing committee unless we're replaced.

14 I think we all feel -- And anybody feel free
15 to please chime in. But, you know, operating like
16 this is not the best methodology to try to get
17 things done.

18 So, if we could urge, you know -- and we have
19 our very esteemed Assistant City Manager here --
20 that some action be taken on the ordinance so that
21 we're not all just waiting to find out are we still
22 on the committee.

23 It's very hard to operate that way and make
24 the commitment and do other things that we're
25 trying to do, as volunteers of the community, not

1 knowing whether we're going to continue to serve.

2 So, I really would ask that the message, you
3 know, be sent to the manager or the commission to
4 please take this up.

5 They can delay on the other issues in our
6 annual report; but, knowing whether we're going to
7 continue to serve or be replace I think would be
8 important and we've only had -- This is or fifth
9 meeting? Yeah.

10 So, obviously, we'd like to continue in our
11 efforts.

12 DR. IHEKWABA: Could I?

13 CHAIR PATHMAN: Absolutely.

14 DR. IHEKWABA: Again, this is Nzeribe
15 Ihekwaba.

16 If I may suggest -- I would recommend that
17 this committee ask for time on the city
18 commission's schedule and address the commission
19 and make the request directly to the city
20 commission for the simple fact that this is
21 committee is a direct creation of the city
22 commission and not the City Manager.

23 Unless you are asking for the manager to make
24 the request on your behalf?

25 CHAIR PATHMAN: Well, we were -- I believe we

1 were told that we had to submit the annual report,
2 which --

3 DR. IHEKWABA: Yes.

4 CHAIR PATHMAN: -- goes to your office.

5 DR. IHEKWABA: Yes.

6 CHAIR PATHMAN: And then, you have to act on
7 that or give us feedback. And then, I guess, we
8 have the opportunity to go before the commission.

9 I'm not sure.

10 Matt, do you or Ajani have the answer to that?

11 MR. HABER: Again, per the code, the annual
12 report is supposed to be addressed to the City
13 Manager. But, Mr. Ihekwaba is correct, that the
14 Manager has no legislative authority.

15 So, I supposed it's a question of how does
16 this committee wish to proceed?

17 Do you wish to pass a motion asking the City
18 Manager to act on your behalf and bring a message
19 to the city commission or do you wish to speak with
20 the agenda office?

21 Perhaps Ajani or myself could speak with the
22 agenda office and get an item on a commission
23 meeting for this committee or for, perhaps, the
24 Chairman or a certain member of this committee
25 elected to represent it to address the commission

1 and discuss this issue directly with them.

2 CHAIR PATHMAN: I think -- And please, other
3 members of the committee voice your opinions.

4 But, it would be nice if the manager's office,
5 at least, on that issue, recommended that our terms
6 continue. And then, I'd be happy to address the
7 commission of their agenda at some time in the
8 future. Because, I think it does flow through, you
9 know, to the manager's office. That who we were
10 asked to submit, you know, the report to. So, I
11 guess, there has to be some response back, I'm
12 guessing, before we actually go before the
13 commission.

14 MR. GOMEZ: When is the Chair supposed to be
15 presenting the annual report -- when it is due?
16 Isn't it due March -- Feb -- I mean April.

17 MR. HABER: January 15th is when the Chairman
18 is supposed to submit his annual report to the City
19 Manager. But, it's simply submitted via e-mail.
20 It's not an official kind of presentation.

21 MR. GOMEZ: So, the Chair will not speak in
22 front of the commission on the annual report?

23 MR. HABER: No.

24 MR. GOMEZ: Then, I would recommend that we
25 allow -- I think you would carry a lot more weight

1 if you addressed the commission as the Chair of
2 this committee. Although, you know, you could do
3 it with the manager. But, I think your voice would
4 carry a lot more weight with the commission if you
5 came and presented.

6 CHAIR PATHMAN: I have no issue with that.
7 I'm just saying that, procedurally, if we had the
8 support of the manager on that issue, I'm happy to
9 go before the commission and speak on our behalf
10 concerning the terms; just so that we're, kind of,
11 going through the channels.

12 MR. REGALADO: Mr. Chair, if I can just ask a
13 question?

14 Wouldn't the Mayor be able to present that as
15 an item on his agenda?

16 MR. HABER: Certainly. Any -- Just like any
17 of the commissioners could decide to sponsor
18 something.

19 CHAIR PATHMAN: Okay.

20 MR. REGALADO: I'll try and get that. And
21 then, if the Chairman could still come here and
22 present to the commission then he can get on the
23 agenda.

24 CHAIR PATHMAN: I think we should make a
25 motion on that?

1 MR. REGALADO: Oh, pardon me.

2 CHAIR PATHMAN: I think we have to, right?

3 MR. HABER: Yeah. I'm saying yes for the
4 record.

5 CHAIR PATHMAN: Yeah. So Pete, would you like
6 to frame a motion?

7 MR. GOMEZ: Yeah. I want to make a motion
8 that we have the Mayor make a presentation to the
9 commission and bring the Chair, on his behalf, to
10 speak in front of the commission on the issues that
11 are -- that we need to have addressed. In
12 particular, the tenure of all of the members of
13 this committee.

14 MR. REGALADO: Second that motion.

15 CHAIR PATHMAN: Can I just make a comment
16 about that?

17 I think that we should make the motion a
18 little bit broader in terms of our annual report.
19 If they ask on any of the issues about our
20 committee that we also -- or I respond to that as
21 well as the issue of our tenure.

22 MR. GOMEZ: So, you want to add language to
23 the annual report?

24 CHAIR PATHMAN: No. No. Language to your
25 motion -- that, I'm guessing, if I'm before the

1 commission they're going to ask me more than just
2 about the issue concerning our tenure. They'll
3 want me to bring up what was done.

4 MR. GOMEZ: Okay. I see. Yes. I'd say open
5 up to any issue associated with this committee.

6 CHAIR PATHMAN: Okay.

7 MR. REGALADO: Second.

8 CHAIR PATHMAN: Second? Okay. All of those
9 in favor say aye?

10 (Thereupon, responses were heard in the
11 affirmative)

12 CHAIR PATHMAN: All of those opposed?

13 (Thereupon, no responses were heard.)

14 CHAIR PATHMAN: Any abstentions?

15 (Thereupon, no responses were heard.)

16 CHAIR PATHMAN: Seeing now, the motion passes.

17 Matt, any comments?

18 MR. HABER: Just to be clear, the committee is
19 going to request that the Mayor bring this up?

20 CHAIR PATHMAN: Yes.

21 MR. GOMEZ: Yes.

22 MR. HABER: And, are you directing anyone in
23 particular to bring that to the Mayor's attention?

24 CHAIR PATHMAN: Jose.

25 MR. HABER: Okay.

1 CHAIR PATHMAN: I think you have a very good
2 relationship.

3 MR. REGALADO: Yeah.

4 CHAIR PATHMAN: Okay. Very good. Okay.
5 Moving into our sub-committee reports.

6 Just a little housekeeping.

7 Jose, while you were away each member of the
8 committee now had a sub-committee and you'll see it
9 identified on the Sea Level Rise --

10 We weren't able to identify one for you. So,
11 take a look at that and before the meeting is over
12 today let us know what area -- You could also be
13 involved in one of the --

14 MR. REGALADO: In multiple?

15 CHAIR PATHMAN: Or you could create you own
16 and then we'll have a discussion on it.

17 MR. BORGES: Okay.

18 CHAIR PATHMAN: Okay? Ajani, which one -- Jim
19 was intergovernmental?

20 MR. STEWART: Yes.

21 CHAIR PATHMAN: So, we won't have a report of
22 that tonight because --

23 UNKNOWN SPEAKER: (Indiscernible).

24 CHAIR PATHMAN: Oh, you do. Did he give you
25 something?

1 MR. STEWART: Yes, just a brief update from
2 him.

3 CHAIR PATHMAN: Okay.

4 MR. STEWART: Okay. On the --

5 CHAIR PATHMAN: Then I'm going to do this.
6 Let me take that out of order; because, I'm sure
7 yours is short and why don't you go first on behalf
8 of Jim.

9 MR. STEWART: Sure.

10 CHAIR PATHMAN: Okay.

11 MR. STEWART: So, a brief update from Jim
12 Murley on the Intergovernmental Committee --
13 Sub-Committee.

14 He just wanted to let the committee know and
15 the general public know that the Southeast Florida
16 Regional Climate Change Compact is planning an
17 Economic Resilience Workshop on April 28, 2016.

18 At this point, there is no agenda or location.
19 That's to be determined.

20 However, when that is planned we can check the
21 Compact's website for further scheduling
22 information.

23 CHAIR PATHMAN: Okay.

24 MR. STEWART: And that is
25 SoutheastFloridaClimate Compact.org.

1 CHAIR PATHMAN: And then -- Is that it from --

2 MR. STEWART: Yeah. That's all he said.

3 CHAIR PATHMAN: Okay. All right. Very good.

4 Thank you, Ajani.

5 Reinaldo you're next?

6 MR. BORGES: Thank you, Mr. Chair.

7 As an Architect and an --

8 CHAIR PATHMAN: Announce your committee if you
9 could?

10 MR. BORGES: The committee that I'm chairing
11 is the Building, Planning and Zoning Committee and
12 I'll make a brief statement about methodology
13 because we do have to abide by the Sunshine Law and
14 all kinds of regulations that the attorneys remind
15 us of.

16 In my role in the community I have a lot of
17 conversation as an active Architect, doing a lot of
18 work in the City of Miami and other municipalities.

19 And also, as a Chair of the Sea Level Rise
20 Task Force at the AIA (American Institute of
21 Architects), I have a lot of activities as well.

22 So, sometimes some of the initiatives and some
23 of the conversations that I'm reporting on are,
24 sort of, a mixture of all of these different
25 initiatives.

1 My focus in this report will be to just give a
2 brief outline of where I think the city is going.

3 Sometimes these outlines are incomplete and we
4 have the representative from the Planning and
5 Zoning Department that has been coming to a few of
6 these sessions and we welcome that.

7 I second the motion that we should have
8 directors also participate in the conversation.

9 The idea that I want to present in this report
10 is, sort of, the idea of design for resilience,
11 which is something that in the architecture and
12 design world we're focusing on.

13 And, I also want to put, for the record, a
14 book which I think is a fantastic read for those of
15 you that are interested. The book is titled
16 "Design for Flooding" by Donald Watson and Michael
17 Adams.

18 And, I could make more information available.

19 I've passed around to the committee members
20 some outlines from the book that basically define
21 what is that we call design for resiliency and it
22 is the way for the future. It is an emerging
23 paradigm in the design profession. It's agenda is
24 to create buildings and communities and regions
25 that restore and improve the ecological services of

1 our natural resources and that mitigate the threat
2 of extreme weather and climate change related
3 issues.

4 As I've mentioned to the committee here, in
5 the past, my focus as an architect is really on the
6 built environment and how we do what we do as
7 architects in a more resilient way and how we
8 modify codes that we have to work from on a daily
9 basis.

10 That is my passion at the moment.

11 You know, from my point of view, as an
12 Architect, it's to make sure that we do get the
13 conversation of adaptation and resiliency towards
14 climate related issues; specifically, in South
15 Florida, with sea level rise, into the conversation
16 of the Planning and Zoning Department.

17 And, of course, we know that there is active
18 conversation.

19 I've had informal conversation with the acting
20 zoning director and with the director himself and I
21 know that there is a lot of intelligence in the
22 department -- a lot of conversation going on.

23 The feeling that I get from the outside as an
24 observer and as someone active in South Florida
25 construction and permitting is that a lot of these

1 conversations need to be happening with a greater
2 sense of urgency; greater transparency, of course
3 and integration.

4 Just the report that we have today that there
5 was an internal conversation is fantastic. I mean
6 the fact that there is an internal conversation is
7 kind of historic, you know, with something that is
8 so transformative to our city and to coastal cities
9 through the world, of course.

10 So, you know, I think that there are
11 incredible things happening.

12 I mean this is the fifth meeting of this
13 committee and the committee, itself, I think it's a
14 breath of fresh air, you know, because I think we
15 could talk about planning and zoning all day long.

16 But, in my world, if we don't really talk
17 about how we do things a little bit different then
18 we're missing something very important in our
19 community which is how do we adapt the physical
20 city; the public works standards, the planning and
21 zoning standards and the building code.

22 And that's, sort of, a focus that I bring to
23 the committee in this conversation; because, I
24 think it's not happening fast enough.

25 These things take a long time. They're very

1 bureaucratic. And, of course, our Governor is not
2 very supportive of the conversations.

3 So, at the State level we have a challenge.

4 But, thank God, you know, we have communities
5 like Miami Beach and the City of Miami and Coral
6 Gables and Pinecrest represented here by the Mayor
7 who has really taken incredible steps forward.

8 I know the City of Coral Gables is taking a
9 major step forward with its concerns.

10 So, my report, Mr. Chairman, is that there is
11 a lot of work to be done. But, there are a lot of
12 good things happening and there are things that are
13 being considered both at the micro and macro scale
14 that, I think, we'll be learning from in the
15 future.

16 Thank you.

17 CHAIR PATHMAN: Thank you, Reinaldo.

18 You make a recommendation at the end of your
19 report here that I was reading.

20 Is there a motion that you wish to make for
21 the committee to consider or adopt as a result of
22 your report?

23 MR. BORGES: Yeah. So, my conclusion here and
24 recommendation is to insist on a more involved
25 leadership from the City of Miami, Public Works,

1 Planning and Zoning, the Building Department in an
2 effort that this committee, really, gets integrated
3 into the daily business activity of the city
4 towards a more resilient future for the City of
5 Miami.

6 I think that should be a role that we're
7 playing. Not just to advise the city commission;
8 but, also, to be a vehicle for change and actions
9 within the leadership of the municipality.

10 So, that's the recommendation. I think, if
11 you want to -- you know -- turn that into a motion
12 --

13 CHAIR PATHMAN: I have a question for Matt or
14 Ajani.

15 Since Reinaldo heads up this sub-committee of
16 our committee, could he participate in future
17 meetings or are he and myself -- like Pete did --
18 so that we can, you know, be more involved in the
19 planning and zoning and public works and telling
20 them what our committee is doing and where we're
21 going?

22 Is that a possibility? To make a motion that
23 -- Not that you're granting us the right to do it;
24 but, that we make such a motion?

25 I think that's where Reinaldo is really

1 heading -- sort of heading --

2 MR. BORGES: What may be an effective format
3 would be to have committee workshops with city
4 leaders, you know, and integrate the committee's
5 activity into workshops that could happen --

6 MR. HABER: I think Reinaldo is on -- I
7 believe Reinaldo is on point that doing this in a
8 workshop where it's in a form that is accessible to
9 the public -- it's a Sunshine notice meeting and
10 then you have the ability to have a free form
11 meeting with members of the staff while multiple
12 members of this committee are meeting in the
13 Sunshine.

14 CHAIR PATHMAN: Okay. So then, you may wish
15 to make a motion that we hold joint workshops with
16 the administration, I think, in this committee
17 along the lines of your recommendation. What do
18 you think?

19 MR. BORGES: Sure.

20 CHAIR PATHMAN: Okay.

21 MR. BORGES: Do you want me to formulate that
22 or do you --

23 CHAIR PATHMAN: Yeah. Just a motion with
24 regards to that and then we can take a vote.

25 MR. REGALADO: And that would be -- I'm sorry.

1 That would be in Sunshine, correct?

2 CHAIR PATHMAN: Yes.

3 MR. REGALADO: So any other member can come?

4 CHAIR PATHMAN: Yes.

5 MR. BORGES: Yes.

6 MR. REGALADO: Okay.

7 MR. BORGES: Yes. Everything we do has to be
8 in the Sunshine.

9 MR. REGALADO: Right. Just making sure.

10 MR. BORGES: So, -- It's a sunshine state.

11 So, I make a motion that we initiate a
12 workshop process with city staff and leadership as
13 committees members to activate ourselves within
14 that format of the city functioning with its
15 process and its democracy and I don't know what
16 else to say.

17 MR. HABER: That's good.

18 CHAIR PATHMAN: Do I have a second?

19 MR. REGALADO: I'll second it.

20 UNKNOWN SPEAKER: Oh, apologies.

21 CHAIR PATHMAN: Okay. Second from Jose. All
22 of those in favor vote by saying aye?

23 (Thereupon, responses were heard in the
24 affirmative.)

25 CHAIR PATHMAN: All of those opposed?

1 (Thereupon, no responses were heard.)

2 CHAIR PATHMAN: Any abstentions?

3 (Thereupon, no responses were heard.)

4 CHAIR PATHMAN: Seeing none, the motion
5 passes.

6 Thank you, Reinaldo. I appreciate that.

7 The next sub-committee is --

8 MR. STEWART: Excuse me, Mr. Chair?

9 CHAIR PATHMAN: Yes, Ajani.

10 MR. STEWART: I just wanted to go back a
11 little bit to the annual report. I just got an
12 update that it was submitted to the city commission
13 on the 29th of January.

14 So, submitted to the Officer of City Manager
15 on the 15th and it's gone to the commission on the
16 29th.

17 CHAIR PATHMAN: Okay. Very good. Thank you.

18 The next sub-committee, which is one that I
19 chair, I guess, is on economics.

20 And what we mean by that is we're trying to
21 focus in on things that are going to be affecting
22 our community.

23 It's easy to say sea level rise. Everybody
24 can envision, potentially, water in the streets.
25 But, there are other issues related to that such as

1 insurance, taxation, banking, things like that.

2 So, I've been working on trying to put
3 together a series of speakers to address the
4 committee on those issues and also trying to come
5 up with a -- in a sense, almost like a graph.

6 But, it's been kind of hard to provide
7 information to show, you know, where flood
8 insurance was five years ago, what happened a year
9 and a half ago when Congress was bailing out of the
10 flood insurance program, what happened when they
11 adopted new language in 2014 and where is it going
12 in the future.

13 You know, personally, I think in ten to
14 fifteen years we may have a phase out of the
15 federal flood insurance program or the program may
16 change dramatically in terms of how you -- how
17 insurance is provided and what it will cost and
18 what areas will be eligible.

19 I think Congress is learning that the federal
20 flood insurance program does what they don't want
21 it to do, which is, it encourages development in
22 high risk areas for low cost insurance.

23 And, I also think that as the process -- the
24 deficit in the program continues to grow -- It's
25 roughly at about \$30 billion. It doesn't include

1 last year. They realize that, potentially, the
2 private sector can handle that element of providing
3 insurance to the public.

4 The problem, of course, is the cost associated
5 with it.

6 But, even the federal government is already
7 raising their rates.

8 Those of you that are in the program for the
9 federal flood insurance -- I think you're going to
10 see, this year, your premiums are going to go up
11 quite a bit.

12 And, I think, in the future that impact will
13 affect banking because in the banking world banks
14 who wish to securitize mortgages and at the same
15 time provide mortgages for the average person --
16 they are going to realize that the federal flood
17 insurance program is inadequate because it only
18 provides \$250,000 for homes and \$500,000 for
19 commercial property. And most banks, I believe, in
20 the future will require some ratio to value. So,
21 if you have a million dollar home, you might be
22 required to have fifty to sixty percent of your
23 home for flood insurance, which means that you
24 would no longer be able to buy all your insurance
25 from the federal government, which creates problem

1 because it's going to be expensive in the private
2 market.

3 It's going to affect banking. Banks survive
4 by lending for the most part.

5 This committee -- The city needs to start
6 exploring this issue and see how the state and the
7 federal government is going to regulate insurance
8 in the future.

9 One factor we, obviously, can't factor in is a
10 hurricane. If we had a direct hit, I think
11 insurance will change dramatically as a result of
12 that because of the flooding and surge that we'll
13 probably see from a storm.

14 The banking industry -- You know, this last
15 round that we're experience now with urban renewal
16 really has not pushed the button that they could in
17 requiring both developers and homeowners and
18 condominium owners to provide flood insurance other
19 than what the federal government requires.

20 But that, I believe is going to change.

21 Banks are going to take less risk. The
22 economies will change in terms of how banks look at
23 mortgages.

24 Today, you can, pretty much still go in and
25 get a thirty year mortgage even a high risk area

1 like Miami Beach.

2 But, in the future, I think that's going to
3 change. I think you'll be able to get a thirty
4 amortization; but, not likely to get a thirty
5 mortgage because the collateral would be at risk
6 and that presents a real problem to the stability
7 of our economy and our work force and those of you
8 who have mortgages if you're -- you know, you have
9 an escrow for you windstorm, escrow for your
10 payment and your taxation and now you would have
11 another escrow for flood insurance which could be
12 very high in the not too distance future.

13 So, we're trying to -- on this committee, to
14 analyze some of those economics. We're hoping to
15 get some information from the city and other
16 sources to try to, you know, evaluate that.

17 Another area that I want to look at on my
18 committee is -- and it was brought up briefly, I
19 guess, at the meeting, Pete, that you were at -- is
20 who is going to pay for it and how much.

21 And, I think, the old way of thinking of
22 always -- whether it's a developer or a tax on a
23 citizens or the use of different things like the
24 hotels, the bed tax, is not going to be enough to
25 cover the types of projects that are going to be

1 necessary.

2 So, I think the city needs to look more at P-3
3 projects, which is public/private partnerships.

4 The current tunnel program that finished last
5 year -- that's a P-3 project.

6 The turnpike extension renovation project in
7 the State of Florida is a P-3.

8 And P-3s are not very familiar to some people
9 here.

10 I personally was involved in a presentation a
11 year ago at the City of Miami Beach -- or a year
12 and a half ago -- and a woman on the committee said
13 that's a socialist way of doing things. We don't
14 do that here.

15 But, that is the growing way in which projects
16 are being done and the way cities will find that
17 they can find funding to get projects done;
18 because, there are private entities that are out
19 there willing to partner with cities on projects
20 like the tunnel and so on that will affect flooding
21 and sea level rise.

22 So, that's some of what our -- my
23 sub-committee is trying to do and I hope in the not
24 too distant future to have more information about
25 those areas that I can share with the public as

1 well as with the committee and where we may be able
2 to take some action in encouraging the city, also,
3 to look in that; because, insurance is something
4 that is going to affect everybody in this room and
5 it's going to affect you in more ways than just how
6 you obtain your insurance.

7 But, the cost associated with it, being able
8 to obtain a mortgage --

9 And, what I do see coming -- because I
10 represent a number of banks -- is that banks will
11 ask you for insurance and you may not be able to
12 get it. You may only be able to get the federal
13 maximum of \$250,000 on a residence.

14 So what happens when you're not able to get in
15 the private -- or can't afford it; well, the bank
16 could foreclose on your mortgage and that's
17 something that the government has to start, you
18 know, looking at and realizing that's something
19 that is not too far away.

20 And that's the end of my report on the
21 economic for today.

22 Pete, I don't know if you have more on
23 emergency management than what you gave.

24 MR. GOMEZ: No. That was it.

25 CHAIR PATHMAN: No? Okay. And then, Tabitha,

1 if you could round it up with natural resources?

2 VICE CHAIR CALE: Sure. So, a couple of
3 things that I want to highlight.

4 The first is that, you know, we're lucky to
5 have some really fantastic and unique natural
6 resources in this area.

7 We've got two national parks right in our back
8 yard with Biscayne National Park and the Everglades
9 National Park as well as other resources in the
10 community that provide us some resilience and
11 protection in the face of things like added storm
12 surge.

13 So, mangroves and coral reefs can provide some
14 natural protection that can -- The coral, itself,
15 can, kind of, break up wave action and make wave
16 impact less severe as it hits the coast.

17 Miami Beach is a barrier island that does the
18 same thing and provides us some protection that
19 would lessen some wave action and things like that
20 during storms.

21 So, just recognizing that there are natural
22 systems like that which can help make us less
23 vulnerable in those types of storm situations and
24 reduce erosion and things like that.

25 At our very first meeting we had a

1 presentation that was given by a staff member from
2 the Nature Conservancy that highlighted some of the
3 ways in which natural systems can help provide some
4 resilience and that there are even communities --

5 I know this is something that they've started
6 to do up in Palm Beach County. But, in terms of
7 trying to provide additional benefits, actually,
8 building things that function as natural systems --
9 So, things like natural shoreline protection
10 projects.

11 So, right now, there is also a relate on-going
12 process to restore the Everglades and there are
13 several Everglades restoration projects that will
14 actually benefit South Florida as a result; but
15 also, the City of Miami specifically and that we
16 actually rely on the Everglades for our drinking
17 water. So, the better we're able to restore the
18 Everglades ecosystem the more we can have water
19 moving through that system that re-charges the
20 aquifer we get our drinking water from.

21 So, I wanted to mention two projects in
22 particular; the Central Everglades Planning Project
23 and Biscayne Bay Coastal Wetlands.

24 But, those projects will, definitely, help
25 this region be more resilient to climate change and

1 help us as we try to protect some of these natural
2 systems that provide us some natural resilience.
3 But also, you know, make sure we have water flowing
4 in to the aquifer that we get our drinking water
5 from.

6 And there is a website:
7 EvergladesRestoration.gov where you can find
8 information about the Comprehensive Everglades
9 Restoration Project.

10 And, I also brought just a few copies of this;
11 but, I'm sure we can make it available.

12 This is a fact sheet on climate change and
13 Everglades restoration that has some specifics on
14 the back about projects that will help make -- help
15 with Everglades restoration. But also, things that
16 will have added benefits of making South Florida
17 more resilient to sea level rise and climate
18 change.

19 Besides reducing salt water intrusion into the
20 aquifer, natural systems can also help restore --

21 Everglades restoration will have another added
22 benefit of reducing land loss in coastal areas.

23 If you look at the map that's on the top of
24 this fact sheet it's from the Army Corps of
25 Engineers and it shows what projected land loss

1 will be in South Florida with and without
2 Everglades restoration with two feet of sea level
3 rise.

4 And, you can tell it's a pretty big difference
5 in terms of land that is additionally eroded away
6 without that increase of fresh water flow pushing
7 back against the sea level rise.

8 And, part of the reason why that's such a
9 different picture from one side to the other is
10 because it's the actual salt water chemistry that
11 can help some of the peat soils in these coastal
12 systems collapse.

13 This is something I know -- Some of you have
14 may have seen the photos of Dr. Hal Wanless, who
15 presented at the last meeting, of him standing and
16 then seeing the soil that's feet below.

17 It's because when you have the salt water move
18 into these fresh water soils the salt water,
19 itself, can help break down those soils and then
20 that speeds up erosion in these coastal areas.

21 So, Everglades restoration is something that
22 I, personally, think is really important just for
23 protecting the ecosystem and the wild life. But,
24 is has added benefits of making us more resilient
25 in the face of climate change and protecting the

1 economic resources we have here; because, tourism
2 is a really important driver of our local economy.
3 People come here because they want to see nice
4 water. They want to be able catch the fish here.

5 And, protecting and restoring our natural
6 systems is a way that we can help provide some of
7 those economic resources that the natural system
8 provides.

9 I also wanted to mention just a few names of
10 people that I think would be useful to either have
11 present to this committee or just, maybe, at the
12 sub-committee itself.

13 The first is Michelle Robinson, who is an
14 Audubon Florida staff member who is working on
15 climate change and sea level rise issues and she
16 also serves on the Climate Change Task Force in
17 Monroe County and she might be able to speak to
18 some of these issues about natural systems
19 providing benefits and how Everglades restoration
20 will provide additional resilience for the Miami
21 region.

22 Bob Johnson, who is one the main scientists at
23 Everglades National Park, will also be able to --
24 would also be able to provide some good
25 information.

1 And, Steve Davis, from the Everglades
2 Foundation, who is also one of the -- who works
3 with a lot of researchers at FIU (Florida
4 International University) on sea level rise impacts
5 and has done work related to some of the studies
6 that showed that effect that I mentioned of the
7 peat collapse because of the salt water chemistry
8 getting into the soil.

9 I also think it would be really useful for the
10 sub-committee to, maybe, meet with some of the
11 staff for Environmental Resources.

12 Ryan had mentioned that they were very
13 interested and would like to be engaged. So, I
14 would be more than happy to meet with them or,
15 maybe, have -- if we've got a full publicly noticed
16 sub-committee meeting at some point that they could
17 attend.

18 And then, I also worked on compiling a list of
19 additional resources. But, I, again, wanted to
20 mention the EvergladesRestoration.gov website for
21 anyone who wants a copy of this; but, wasn't able
22 to get one of the few paper ones I brought.

23 You can also find it if you just Google search
24 Audubon Florida Climate Change and it should pop
25 up.

1 But, it's under Audubon Florida's document
2 library on-line.

3 And, I can also provide some links and
4 information to some of that peer reviewed research
5 that FIU has been doing.

6 And, I also, just wanted to mention that the
7 most recent national academy's report, which I
8 think came out in 2014 --

9 Every two years, the National Academy of
10 Science puts out a report on Everglades Restoration
11 progress and highlighting some of the needs in the
12 ecosystem; where they're meeting goals, where
13 they're lagging behind and just, kind of, a good
14 solid peer reviewed national academy's report on
15 what's going on in that ecosystem.

16 And one of the things they highlighted in
17 their last biennial review is that there really is
18 a pressing need to speed up Everglades restoration.
19 Not just for the ecosystem help; but also, because
20 it will provide so many benefits in the face of the
21 changing climate and sea level rise. That this
22 just provides another reason to speed up these
23 restoration efforts; because, they'll reduce land
24 loss -- because, it reduces salt water intrusion
25 into the aquifer.

1 So, I just wanted to highlight that this
2 report is also available and has information
3 specific to climate change and sea level rise for
4 this region.

5 And that's all I've got.

6 CHAIR PATHMAN: Thank you Tabitha.

7 I just wanted to share with the committee and
8 the public, the other day I was in a meeting of
9 developers -- business people that I represent and
10 they were like, well, the Everglades is all the way
11 out west. You know, why is everybody so concerned?
12 How is it connected?

13 And I reminded them how far the Everglades
14 used to come. It used to be where the airport is.
15 And, how important it is to our ecosystem and how
16 connected it is to our fresh water.

17 And, it was a very interesting group of people
18 who came in thinking one way and how they left in
19 terms of understanding just how precious our
20 environment and the Everglades is.

21 Does anybody from the audience have any
22 questions for any us on our committee reports or
23 anything with staff so far?

24 Yes, Jane?

25 MS. GILBERT: Wayne, for your committee; just

1 curious if in your discussions with the insurance
2 industry -- And, maybe, you said this and I didn't
3 catch it. But, are you looking at what mitigation
4 strategies you can take in order to maximize or --
5 the benefits for insurance purposes so that when we
6 figure out how much this is going to cost we can
7 allocate costs most effectively to keep insurance
8 rates as low as we can?

9 CHAIR PATHMAN: Well, some of the discussion
10 so far, the simple answer is if you could building
11 your house at a higher level -- build your
12 buildings, which Reidaldo touched on, would be more
13 resilient and designed differently -- The problem
14 is that the issue is here today about insurance.
15 But, nothing has happened locally, really, with the
16 codes to bring everything up.

17 In Miami, for instance you have roughly
18 between the Brickell Avenue area and 36th Street
19 sixty new buildings that are going to be built or
20 permitted or are under way and they're being built
21 pursuant to the old code, which doesn't take into
22 consideration sea level rise.

23 So, insurance is going to be very expensive in
24 the future for many of those buildings,
25 potentially.

1 Infrastructure changes will also correct,
2 potentially, some of the costs that insurance
3 companies will pass on.

4 And, think of it in terms of how we adapted
5 after Hurricane Andrew where we changed what, at
6 the time, was the South Florida Building Code;
7 today, the Florida Building Code.

8 And, most people on the Development Building
9 Committee were against the changes. But, they
10 happened anyhow. And, as a result, rates did not
11 rise as high as they could have.

12 But, the biggest problem that we face with
13 insurance companies is they like to make to money
14 and they're the richest companies in the world.
15 And, they're going to make a lot of money and
16 they're going to change the way we buy insurance
17 in, probably, the next ten to twelve years; much
18 like what happened in California many years ago
19 with earthquake insurance.

20 You'll have higher deductibles and capped
21 insurance in areas where they won't insure.

22 So, what government does to, you know, build
23 infrastructure, to stop flooding and bear risk,
24 will help tremendously by trying to keep rates
25 down.

1 But, there isn't any, you know, magical
2 formula that I've heard from insurance companies
3 other than --

4 They won't tell you this, sometimes, directly.

5 But, don't build where you're building, you
6 know. Build in areas that are less risk and not,
7 you know, special flood hazardous areas like Miami
8 Beach.

9 So, as things start to change and depending on
10 what government does, you know, they're going to
11 have to deal and regulate the insurance industry as
12 well.

13 I think in the not too distance future -- and
14 I don't think it's immediate -- but, insurance
15 companies will potentially stop -- will start to
16 abandon Florida or certain areas; because, the risk
17 will be too great -- because, unlike a hurricane
18 that you can prepare for and it passes through and
19 you can rebuild, once, you know, sea level rise
20 reaches a certain -- It's not retreating. It's
21 only going to get worse.

22 So, the climate risk models that insurance
23 companies are using are based on historical data.

24 They are not basing their new rates on
25 historical data. It's perception.

1 So, obviously, their perception is going to be
2 higher because they have no historical data to base
3 it on.

4 So, it's going to change and it's something
5 that communities, government, really has to start
6 focusing in on because without insurance most
7 people are going to choose not to live here and
8 it's going to have a real economic impact.

9 One last thing. Reinaldo had for his
10 presentation some slides and some things from a
11 PowerPoint that he wanted to share.

12 Okay. Do you have a question? I'm sorry.
13 Please come to the podium and state your name.

14 MS. RAY: My name is Nancy Ray. I just wanted
15 to mention that I've been to many of these climate
16 change meetings and you're going over a lot of the
17 same things they do at other meetings and you seem
18 a little -- not focused.

19 So, what I'm suggesting to you is to, maybe,
20 focus on climate change since that's the -- what
21 your flyer says -- climate change. Like, maybe,
22 talk about emissions from cars and things like that
23 which would help climate change or whatever you
24 want to do.

25 I don't care what you want to talk about; but,

1 you're too -- got too many things going and I've
2 heard a lot of this at the county climate change
3 meetings.

4 So, we're re-doing what they already did.

5 So, I'm thinking, you know, rather than
6 re-invent the wheel here, you just, sort of, get of
7 your own little -- I guess, (indiscernible) focus
8 because you can't do it alone. You're trying to do
9 it alone. You need to have five separate
10 committees on a panel this small. It seems like
11 it's a very large goal. And, your goal -- If it
12 was narrower you'd get more done.

13 That's all. Thank you.

14 CHAIR PATHMAN: Thank you.

15 I'd just like to address this so everybody is
16 aware. We're not tasked with discussing anything
17 about climate change. We are the Sea Level Rise
18 Committee. That is all that we are to focus on.
19 And, we are a new committee. And, you know, the
20 things that we're doing is part of sorting out what
21 is going been going on -- what's going on at the
22 county level, what going on at even the State level
23 and locally with other municipalities.

24 But, our goal is to come up with ideas and
25 work the administration to try to implement some of

1 these ideas.

2 So, it's going to start broad. We will narrow
3 things down and while our sub-committees that we
4 have --

5 We felt that it was important because while we
6 were only task by the commission to be -- The
7 members --

8 There is one member that will be appointed
9 that we're waiting on. So, we'll be one more
10 member. There's another member that's absent
11 today.

12 But, the idea is that if we broke down into
13 sub-committee, we actually could get more done and
14 be more effective.

15 And, I think, we gave some really good reports
16 tonight and we all try to stay very active because
17 many of us are active in this issue in other areas
18 and it's good to report back to the committee on
19 these issues.

20 Reinaldo --

21 Did you have a question? If you could please
22 state your name for the record.

23 MR. BARNELL: Hi. Craig Barnell with the
24 Nature Conservancy

25 Just quickly. It was very interesting to hear

1 what the different sub-committees are doing and I
2 would -- I think it would be interesting towards
3 the end to see how your different work connects and
4 can help each other.

5 So, for example, when we think about city
6 building and updating codes it's very simple to
7 think about, you know, different ways to think
8 about storm water management including the use of
9 natural systems and how, you know, different types
10 of climate impact can be taken into account in the
11 use of natural systems to, kind of, help with that.

12 So, I see a lot of inter-connectiveness
13 between different groups and it might be nice at
14 the end to, kind of, see how one work can building
15 up the other.

16 MR. GOMEZ: Yeah. Mr. Chair, may I address --

17 CHAIR PATHMAN: Mr. Gomez, yes.

18 MR. BORGES: I think that the first comment
19 and this comment create the awareness of the fact
20 that this is most transformative issue affecting
21 urban and other area on our planet. Right?

22 So, here we have a committee of volunteers
23 trying to advise the commission of the City of
24 Miami.

25 As many of you may know, Miami, actually,

1 makes the list of city with the highest degree of
2 valuable assets at risk, you know, the damage of
3 sea level rise, which is really permanent flooding
4 in our city.

5 So, I mean, I personally -- I appreciate the
6 idea that we're not focused.

7 This is so complex. There are so many
8 dimensions to the impact that this will bring to
9 our community that what you see here is actually a
10 very diverse perspective on how we, in this panel
11 here, try to see the impact of climate change and
12 sea level rise.

13 And, one of the things that we had in the
14 previous meeting was the conversation about what is
15 our purpose and what is our task and what has the
16 commission really asked of us to do.

17 And, we had a -- I think it was a pretty
18 healthy conversation about the things that we may
19 want to comment and discuss in these meetings.

20 Personally, as an Architect, I think we're
21 doing much better now-a-days with resiliency --
22 with sustainability, I'm sorry.

23 And, there's a distinction between
24 sustainability and resiliency.

25 In the City of Miami, for example, Miami 21,

1 our new zoning code, allows us now to tell our
2 clients that they need to allow us to design a
3 sustainable building and meet certain standards of
4 sustainability for our buildings.

5 That's totally new to the City of Miami and
6 that is happening now in a very, kind of, automatic
7 way; because, the code requires it.

8 What we see missing, right now, is a component
9 to the code that deals with the question of
10 resiliency and what does that really mean, you
11 know, to zoning and building and then public works
12 standards and so on.

13 So, again, you know there has to be patience
14 and tolerance on both sides of this conversation.

15 You know, we met here five times, so far, as a
16 committee and for anyone to stand up at the podium
17 and, sort of, say that we're not focused on this or
18 that -- I mean it's like, look, that's fine. You
19 could always express yourselves.

20 But, one of the things that I wanted to do as
21 I ended my presentation -- which Wayne just alerted
22 me -- and Mayor Lerner if you give me two seconds
23 just to show these imagines -- because one of the
24 things that I find is deficient is for us, as a
25 community, as a society, to really understand and

1 visualize the impact of something that will happen
2 to our cities during sunny days.

3 So, these images that I've been preparing for
4 some lectures that I'm presenting, kind of, shows
5 the most valuable street that we have and the most
6 valuable parts of our community, which is really in
7 the financial district of Miami, which is why I
8 think we made the number one list on that
9 particular chart compared to other cities with
10 greater populations.

11 It's because we have a lot of these assets at
12 about, maybe, five to seven feet above sea level.

13 And I just want to share, maybe, five or six
14 of these images for all you and just for the record
15 of this committee's meeting today, to see how our
16 city would look under permanent flooding.

17 This is really not the kind of flooding that
18 happens after one of these incredible rain storms
19 that we also experience now-a-days, which is
20 another challenge. This is sort of permanent
21 flooding.

22 So, Stewart, please -- the next image.

23 And this is sort of Brickell at the Four
24 Seasons Hotel, which is a state of the art, five-
25 star hotel, which is beautiful.

1 And, this is what would happen if we were to
2 have, you know, permanent flooding across from the
3 Four Seasons.

4 Next image.

5 This is, you know, the intersection of
6 Brickell and Coral Way, which is also, kind of,
7 like at the heart of the financial district.

8 Actually, this is the bank known as Spiritu
9 Santos, which is one of the most beautiful
10 buildings that we Brickell and this is what it
11 would like if it were flooded permanently.

12 So, you know, as an Architect what I try to
13 think about is, sort of, how do we -- how do we
14 adapt these buildings in the future and how do we
15 design buildings like this today that will be more
16 flexible in allowing us to adapt them through the
17 future -- in the future, without having to abandon
18 the ground floor and have significant damage to the
19 physical structure.

20 So that's, kind of, one of the things that I'm
21 involved with in my firm -- is to, sort of, think
22 through that problem.

23 Next image.

24 This is the epicenter of the financial
25 district which actually used to flood a lot. DOT

1 (Department of Transportation) -- Since Brickell
2 was actually a DOT road passing through the City of
3 Miami, they installed some drainage and it flood
4 less. But, in an afternoon storm you can see two
5 or three feet of water in this intersection.

6 Next image.

7 So, this is what would happen if this
8 intersection were to be flooded permanently. Okay?
9 This is without any rain storms. This, sort of,
10 just, you know, sea water coming up to the streets
11 of Miami.

12 Next image.

13 And, again, you know, world class architecture
14 and architects, as you all know, focus on the
15 singular, beautiful, iconic piece of architecture
16 that we produce and sometimes, you know, we don't
17 think much about what happens if --

18 Next image.

19 -- we were supposed to have this, sort of,
20 permanent flooding and how do we deal with that;
21 how do we think through that today so that, you
22 know, we can create a sense of urgency that would
23 allow us to build a city that would suffer less
24 losses. And, hopefully, you know insurance
25 companies won't be as concerned.

1 But, associated with all of these images is
2 the fact that the streets and the -- you know, the
3 infrastructure of our city also needs to be
4 modified which is highly expensive and that happens
5 in cities, typically, once every sixty years and
6 now we see the City of Miami Beach, for example,
7 starting to raise streets and battling with that
8 issue of elevating the city.

9 This is -- You know, the river -- the Miami
10 River, as you know, is fluid and that fluid that
11 comes into and navigates into the city will also
12 bring water into the lower areas around the river;
13 because, typically, if you look at the map, the
14 river and its edges are actually quite low.

15 So this, kind of, visualizes what would happen
16 if the river were to overflow.

17 So again, just -- You know, I guess food for
18 thought is what they say. It's just a way of
19 communicating, you know, a concern that I
20 personally have about what happens to the physical
21 city.

22 What do we do today, you know, to, kind of,
23 focus on this thing?

24 I'm less concerned about how do we adapt
25 single family homes even though those will also be

1 at risk.

2 It's easier to imagine how we do that than to
3 adapt some of these very complex, very expensive,
4 structures that we have in this beautiful city.

5 So, that's my presentation.

6 I think -- Mayor Lerner, if you want to
7 approach the podium.

8 CHAIR PATHMAN: Thank you, Reinaldo.

9 Mayor Lerner, did you have some comments?

10 MAYOR LERNER: Yes. Thank you.

11 So, first of all, I want to congratulate the
12 City of Miami for moving forward with this citizen
13 led task force.

14 I think it's critically important especially
15 for a city like the City of Miami.

16 I do want to encourage you to take advantage
17 of the work that's been done throughout the
18 Southeast Florida Regional Climate Action Compact.

19 We are very far behind in Miami-Dade County
20 compared to Broward County in terms of working
21 collaboratively, all of the cities together and the
22 cities working with the county.

23 Two years ago, when I was installed as the
24 President of the Miami-Dade League of Cities, my
25 priority for that year was to work with the county

1 and to try to start replicating, in Miami-Dade,
2 what was going on and has been going on for, at
3 least, five years in Broward County.

4 And so, I've been working with Nicole Hefty
5 and what was left of the County Office of
6 Sustainability.

7 Two years ago, the first thing we did was
8 replicate the survey that Broward County has done
9 with their cities to get a baseline to see who knew
10 what and who was doing what and they are already --
11 have already done the second iteration of the
12 survey in Broward County.

13 We did our first. It couldn't have happened
14 without a commitment from Nicole and her officer.

15 And, we didn't have much in the way of
16 support. I'll say it. She can't.

17 The Mayor or the administration, we just
18 plowed ahead and did it anyway and what we learned
19 was it like pulling teeth to get cities to even
20 complete the survey. It took the whole year.

21 I got an intern from the Rosenstiel School at
22 UM (University of Miami) to help with the
23 information and to create a report.

24 And what we learned was most cities are
25 clueless. They know every little. They've done

1 even less which is one of the reasons that I
2 congratulate you.

3 Unfortunately, that project just, kind of, --
4 When I left the League as President, my successor
5 didn't follow up on it and it has not moved
6 forward.

7 A reason for hope, however, is that
8 Commissioner Francis Suarez is going to be sworn
9 in, in two weeks, as the new President of Miami-
10 Dade League of Cities.

11 So, I would urge you, as a task force, to
12 encourage him to use his leadership at the League
13 to bring both your city and the other thirty-three
14 cities forward in a more collaborative fashion to
15 learn from what others have been doing in a much
16 more aggressive manner.

17 I would urge you to bring the -- some of the
18 staff and leaders from the City of Fort Lauderdale,
19 which I call the gold standard of moving forward in
20 a very aggressive manner.

21 And, let them share with you what they've
22 done. Let them share their plans.

23 Even, I and (indiscernible) Pinecrest, eight
24 square miles -- 18,000 residents -- in drafting a
25 climate action plan.

1 I think the every city should have one. You
2 could do a little homework and research where the
3 good plans are.

4 I was at a seminars years ago in Seattle and
5 they shared theirs.

6 I'm nothing like Seattle; but, I loved their
7 climate action plan and I'm using that framework
8 for mine.

9 So, there are tremendous things going on all
10 over the county.

11 In October, Mayor Cason and I were invited to
12 a rising seas summit up in New Hampshire. There
13 were Mayors and Councilpeople from thirty coastal
14 communities all over the country that were brought
15 together to see who's -- again, who's doing what
16 and what kind of resources we need to be sharing
17 among ourselves and to be demanding of the federal
18 government.

19 So, again, there are resources at that level.

20 The U.S. (United States) Green Building
21 Council also held a summit that I was invited to
22 last May, at the Aspen Institute. And, there were,
23 probably, a dozen other NGOs (non-governmental
24 organizations) that were also focused on resiliency
25 and on how to move forward.

1 They have a wonderful guidebook, the U.S.
2 Green Building Council, on assessing your city's
3 vulnerabilities and doing a risk benefit analysis
4 on how to go forward, where to focus your
5 attention.

6 And then, lastly, the critical importance of
7 addressing your building code; because, what you
8 showed is what happens when we don't address the
9 building code.

10 We were not a part of the community waiting
11 system as a new city. And, we had just invested
12 heavily in creating our own Storm Water Master
13 Plan.

14 It cost a lot of money. But, it's -- The
15 benefit of doing that was to take us through the
16 steps we need to go through to revise our building
17 code, which we are now doing -- to upgrade our
18 capacity for resiliency in the future.

19 We got some push back from the builders. Not
20 like what you all and the city will get. But,
21 there's no choice. There really is no choice but
22 to be much more aggressive in changing the building
23 code.

24 So again, if you do a little homework and see
25 what other cities are doing and, throughout the

1 Compact, what other counties are doing --

2 Broward County provided their cities with a
3 vulnerability analysis of the road, which I
4 understand Miami-Dade County has; but, I haven't
5 seen it as a Mayor. So, I think --

6 They've also done a vulnerability assessment
7 of the county and the county infrastructure and
8 they are identifying adaptation action areas which
9 you should be doing.

10 We've done it in Pinecrest and adopted it as
11 part of our Comprehensive Development Plan and
12 submitted it to the State.

13 So, those are things that you can learn from
14 Broward, from Fort Lauderdale, from the other
15 cities that have moved forward in a much more
16 aggressive manner and you don't really have to
17 re-invent the wheel and start from scratch.

18 CHAIR PATHMAN: Thank you very, Mayor.

19 MAYOR LERNER: Congratulations.

20 CHAIR PATHMAN: I appreciate your time.

21 VICE CHAIR CALE: (Indiscernible).

22 CHAIR PATHMAN: Question, Tabitha?

23 VICE CHAIR CALE: Oh, not a question.

24 CHAIR PATHMAN: Comment.

25 VICE CHAIR CALE: I also wanted to make a

1 comment based on some of those last comments.

2 I think one of the things we've been doing
3 early on is really trying to see out what other
4 existing resources there are and on-going efforts
5 there are so we can incorporate the knowledge
6 they've already developed into some of the
7 recommendations we make.

8 So, I can understand, you know, maybe it seems
9 a little scattered -- maybe it seems a little
10 disparate; but, I really think we really are trying
11 to get a handle on what good information is already
12 out there so we can, kind of, use that to
13 incorporate into the work we're doing now.

14 And, I think also, having Jim Murley on the
15 board, who is not here tonight -- but, being on
16 that intergovernmental sub-committee, I think --
17 and with the position he currently has with the
18 county, will really help us make sure we're
19 plugging into existing efforts and, you know, have
20 a sense of what's going on.

21 But, I think the recommendation to have
22 somebody from the City of Fort Lauderdale present
23 is a great one.

24 I know they were recognized this year at the
25 Southeast Florida Regional Climate Compact meeting

1 for the excellent work that city is doing.

2 So, they may have some good lessons for us.

3 CHAIR PATHMAN: Reinaldo?

4 MR. BORGES: So, just following up on your
5 comments about, sort of, the learning that is
6 taking place -- right -- that's, sort of, one the
7 anxieties that I bring to this; because, at the
8 academic level, you know, you have FIU, University
9 of Miami and FAU (Florida Atlantic University).

10 There are a lot of academic powerhouses in
11 this community that are independently creating
12 their own expertise and their own knowledge center
13 and now Tiffany has got the Solution Center at FIU
14 and, I know the University of Miami -- Actually,
15 the marine center that you mentioned --

16 MAYOR LERNER: Rosenstiel.

17 MR. BORGES: They just, actually, built a
18 simulator to simulate storm surge, which is, sort
19 of, the first ever -- And it's amazing; because,
20 now we could actually learn what happens during
21 these storms in that lab and we can, kind of, test
22 ideas -- architectural ideas and built form idea
23 to, hopefully, build a more resilient coastal city.

24 But, you know, I think that --

25 Don't take for granted that a lot of us on

1 this committee have, actually, gone to the
2 Netherlands, with the government over there, for
3 ten days and did a lot of learning and learned a
4 lot from what happened after Sandy in New York.

5 There's a lot of learning going on.

6 But, we also know that in South Florida we
7 have very unique circumstances that require
8 different solutions, different ways of thinking and
9 we're also, sort of, learning that. And, this is
10 quite an involved process.

11 But, in closing -- because the Chairman here
12 is going to, probably, turn my microphone off.

13 One of the things that concerns me is that the
14 City of Miami cannot really tackle this effectively
15 unless it has paid full-time consultants.

16 You know, as an advisory board here, that
17 we're all volunteering time on, we cannot possibly,
18 you know, solve the problem of sea level rise in
19 the City of Miami.

20 I think that this is something that cities and
21 municipalities and the county have to do through,
22 you now, full-time engaged consultants.

23 There are some cities, as you know, that are
24 already doing that and that, sometimes, doesn't
25 happen fast enough, you know.

1 So, you know, that's something that I think we
2 have been recommending is that --

3 You know, right now, there's one full-time at
4 the City of Miami and he's sitting here, for
5 sustainability. And, I know that they're searching
6 for a resiliency person as well.

7 The county, finally, now has Jim Murley, which
8 is a blessing. And, you know --

9 So, this is all evolving and, hopefully, it
10 evolves faster and we're all learning, of course.

11 I'm practicing a lot in Fort Lauderdale and
12 learning a lot about how they see that how, you
13 know, their standards are being modified.

14 I do report that some of these standards are
15 not as aggressive as they should be, you know.

16 Like, for example, our friends in Miami Beach
17 are right now debating whether they do one foot or
18 three feet of free board, you know, for residential
19 houses, you know.

20 And, I personally have had some interesting
21 experiences in asking them to allow me to raise
22 some of these \$20 million houses that we're doing
23 and I have been denied.

24 So, you know, there's a lot of angst and a lot
25 of concern about how quickly we are adapting and

1 that we're modifying what we're actually putting
2 into the ground and building and permitting,
3 tomorrow morning, as quickly as we can; because, it
4 doesn't happen too fast in my experience and the
5 experience of some of us.

6 CHAIR PATHMAN: Thank you for your comments,
7 Reinaldo.

8 We now have a presentation from Nicole Hefty
9 from the Southeast Florida Regional Climate Compact
10 and their annual meeting that was held last
11 December.

12 Nicole, thank you for being here. We really
13 appreciate it.

14 If you could please state your name and also
15 your position with the county, on the record?

16 Thank you.

17 MS. HEFTY: Thank you for inviting me. Nicole
18 Hefty. I'm the Sustainability Manager for what was
19 the Office of Sustainability. It's now the Office
20 of Resilience, as has been discussed.

21 And, I've been asked to present the recent
22 update of the Unified Sea Level Projection for
23 Southeast Florida that was originally developed by
24 the Compact and has since been updated.

25 So the objectives of the workgroup were the

1 same as with the original projection, to make sure
2 that this projection is as easy to use as possible,
3 certainly, given the complexity of the information
4 that goes into developing it.

5 It's specifically designed for the folks that
6 need to do the planning, that need to make the
7 policy -- policy decisions so our technical staff
8 and our local elected officials and administrators
9 --

10 And again, looking at how we can utilize this
11 project for adaptation planning, policies, project
12 design and hydrodynamic models that are currently
13 being developed.

14 And, -- Sorry. Go back please.

15 They chose to retain a similar format and
16 similar milestones to, kind of, make it as
17 consistent with the original projection as
18 possible.

19 Next slide.

20 So I wanted to just stress that this group
21 really took a very hard look at the most recent
22 information and looked at very pertinent documents
23 that have since been developed from the original
24 projection or since the original projection.

25 This includes the Intergovernmental Panel for

1 Climate Change Fifth Assessment Report developed --
2 or released in 2013. It includes the Third
3 National Climate Assessment as well as NOAA's
4 (National Oceanic and Atmospheric Administration)
5 Sea Level Rise scenarios. The Army Corps documents
6 are very pertinent and were relied on quite heavily
7 for the original projection, as well as the update.
8 As well as the Miami-Dade Sea Level Rise Task Force
9 report that was released in 2014 and I'll talk a
10 little bit about later.

11 And, they really took a very close look at a
12 lot of recently released peer reviewed publications
13 on factors that are very important to determining
14 the amount of rise and the rate, including
15 acceleration, the gulf stream, variability,
16 modeling, nuisance flooding, ocean circulation, ice
17 melt and permafrost thaw.

18 Next slide, please.

19 Another important factor, not only looking at
20 the global models and projections, is certain
21 regional factors that are very important to
22 determining our regional sea level rise rate.

23 And, you know, you'll hear about global
24 (indiscernible) sea level rise. But, as you've
25 also, probably, heard it can vary. It can be

1 increasing in certain areas. It can be decreasing
2 in certain areas based on certain regional factors.

3 So, for us -- Looking at vertical land
4 movement, for us here in Southeast Florida that's
5 not too important. We don't have a lot of vertical
6 land movement.

7 Certainly, New Orleans is a different story.
8 They have a lot subsidence. So, that really makes
9 a big difference in their relative rate of sea
10 level rise there.

11 So, that's something that we are looking at.

12 One thing that we have to be aware of is that
13 there has been some subsidence in the gauge in Key
14 West and that's the gauge that we utilized because
15 it has the longest history.

16 So that is something that we need to make sure
17 we take into account looking at future projections.

18 In addition, one of the big factors that could
19 really affect the future of sea level rise here is
20 the anticipated slowing of the gulf stream and the
21 Florida current and that could be in response to
22 melting land ice and global sea level rise
23 acceleration.

24 And so, what the workgroup looked at was that
25 it has the potential of contributing three to eight

1 inches to sea level by 2100.

2 And so, in the interim, we might want to look
3 at adding fifteen percent to the global values for
4 regional planning should there be a determination
5 that it is indeed slowing.

6 Next slide, please.

7 And, I wanted to acknowledge -- I, actually,
8 got these slides from Dr. Samantha Danchuck and she
9 works for Broward County and she was the
10 coordinator for this workgroup and she was the one
11 who, really, facilitated the work getting done.

12 It took over a year.

13 And, I wanted to put this slide further ahead
14 in the presentation to just show you that there is
15 a tremendous amount of knowledge in this workgroup.

16 I know, for a fact, that at least ten of these
17 individuals have Ph.D.s and they are represented by
18 the various universities and the Army Corps of
19 Engineers.

20 And, my name is up there and I want to just
21 tell you I had nothing substantive to contribute to
22 this group. I attended some of the meetings just
23 to, kind of, hear what they were saying; but, quite
24 frankly, a lot of the conversations were well over
25 my level of understanding.

1 But, I did want to acknowledge that one of the
2 members, Dr. David Enfield, agreed to join me this
3 evening.

4 He's sitting here in case you ask any really
5 difficult technical questions that I can't answer.
6 He's here to answer those questions.

7 And, I wanted to mention that he was not only
8 a member of this workgroup, he was also a member of
9 our Sea Level Rise Task Force as well as our
10 original Climate Change Advisory Task Force that
11 was created in 2006.

12 So, he's been very much engaged in these
13 conversations, is extremely knowledgeable and I
14 rely on him quite a bit.

15 Thank you.

16 Next slide, please.

17 So this is the updated projection. I will try
18 to go through this quickly and I'm going to talk
19 about the different curves that you see here.

20 But, in general, this is the projection -- the
21 updated projection that the workgroup came to. And
22 we, again, kept the same milestones; 2030 and 2060.
23 We did add 2100.

24 That is because it was felt that we needed a
25 longer projection for some of the longer term

1 projects and as I'll mention later that was
2 important for Miami-Dade County, in particular.

3 Next slide, please.

4 So, the important differences and points to be
5 aware of for this projection is that the first
6 projection referenced 2010 as the baseline.

7 This projection referenced the year 1992 and
8 the important reasons for the that is that it
9 allows a simpler conversion from mean sea level to
10 the NAVD-88 (North American Vertical Datum if 1998)
11 survey data. That is the standard that is used.
12 And, it's also very much more consistent with the
13 publications that they workgroup looked at to come
14 up with the projection or the update.

15 And again, as I mentioned, it was extended
16 beyond the original projection in 2010 of 2060 to
17 2100.

18 Next slide, please.

19 So the top -- And, I would suggest that you.
20 maybe, take a look as I'm going to through the
21 lines. You have the document; the guidance
22 document. It has that overall projection that I
23 showed earlier. So, you might want to just, kind
24 of, reference that as I talk about the different
25 lines on the curve.

1 This -- The blue solid line is the upper level
2 of the cone that we're really focusing on for
3 planning and it's the upper boundary of not only
4 the 2015 projection; but, also the 2011 projection.
5 And, it was derived from, again, several documents;
6 particularly, the National Research Council's NRC
7 Curve-III.

8 And the important thing, also, to mention --
9 that I mentioned is that these are all based on the
10 Key West tide gauge that we have the most long term
11 data from.

12 So, the upper level here is 10 inches by 2030;
13 26 inches by 2060 and 61 inches by 2100.

14 Next slide, please.

15 In the lower -- And this is a dotted curve.
16 It looks solid here. But, this is based on the
17 IPCC (Intergovernmental Panel on Climate Change)
18 Assessment Report (indiscernible) Medium Curve.

19 And again, that's the lower boundary of the
20 planning cone that we're really recommending that
21 folks use.

22 And again, it's based on the Fifth Assessment
23 Report and considering the highest of the four
24 greenhouse gas projections or trajectories
25 mentioned in the IPCC report, which is the RCP 8.5.

1 Next slide, please.

2 So the application of this cone is really to,
3 again, look at the -- what projects you're planning
4 and the thought is that you will look within this
5 range -- within this cone that's shaded and
6 depending on the life expectancy of the particular
7 capital project you will want to consider, you
8 know, whether it's the 6 to 10 or the 14 to 26.
9 And, you want to look at, for this projection,
10 those projects that are more easily replaced or
11 adaptable and are also not so interdependent with
12 other infrastructure.

13 So, when you're looking at -- considering the
14 project and the sea level rise projection you want
15 to consider the potential benefits of looking at
16 the higher end of the curve versus the cost to
17 adapt to that higher end.

18 And then, of course, looking on the other
19 side, the consequences if you're going to design to
20 the lower end of the curve on what would be the
21 consequences of designing to that if it were to be
22 inundated by sea level rise or storm surge.

23 So, these are just some of the guidelines.

24 No, go ahead. That's fine, Ajani. Thank you.

25 So the high line -- This is an orange solid

1 line on the curve. And, the workgroup had a lot of
2 discussions about the acceleration of sea level
3 rise and the anticipated based on what's happening
4 at the poles.

5 And, they felt very strongly that we wanted to
6 make sure that this was defensible. So, it
7 provided this curve with the recommendation that
8 you might want to consider this curve. If it's
9 something that is very risk intolerant
10 infrastructure that it's a much longer planning and
11 trajectory. And, that something that's not very
12 easily removable, replaceable or adaptable should
13 the rate of sea level or the magnitude of sea level
14 rise increased beyond that smaller cone that we've
15 been talking about.

16 So -- Next slide, please.

17 The lower curve -- And this was just really
18 for reference and this is based on the Army Corps
19 intermediate and the NOAA's intermediate low curve.
20 It was, really, again, a reference.

21 This was the lower boundary of our original
22 2011 projection derived, again, from some of these
23 international documents; the NRC Curve-I.

24 And again, this particular trajectory would
25 require significant emissions reductions.

1 So, at this point we're not really expecting
2 to be able to see that rate of sea level rise.

3 We're anticipating that over time. It will be
4 greater.

5 The next slide, please.

6 So the comparison to the projection again is
7 that we started with a 1992 baseline as opposed to
8 the 2010 and that it goes to 2100 for those longer
9 projects.

10 And, the initial projection, through 2030, is
11 not far off from the original 2011. But, one thing
12 to note is that we have had three inches of sea
13 level rise since 1992 that wasn't originally
14 considered when we were doing the 2010.

15 So, one of the easy comparisons is to add that
16 additional three inches to the projection.

17 But, really, just looking -- just -- for
18 planning, to really look at this cone is where you
19 should focus your efforts.

20 Next slide, please.

21 Let's go on. I've already talked about this.
22 Let's go on to the next slide.

23 So the guidance document that is available
24 on-line at the website that's listed there -- It is
25 on the Compact website.

1 It provides the projection and the methodology
2 of how they got to that projection as well as the
3 sources. It provides a guidance for using the
4 projection and in Appendix A is included a four-
5 page quick guide with the figure. Appendix B talks
6 a little bit more about the science that was
7 considered in the update. And, Appendix C include
8 the workgroup recommendations.

9 Next slide.

10 So, in general, the workgroup recommendations
11 were that they will revisit this in, approximately,
12 five years or sooner if there is more information
13 that they feel is very pertinent and might lead to
14 a revision of the projection. But, right now,
15 they're planning on five years.

16 They want to remind everybody who is using it
17 that this is a continuing trend, not an end point.
18 The science and the data that's coming in is new
19 all the time. So we need to keep that in
20 consideration.

21 We are, currently, on a higher emissions
22 trajectory in the sense that we already have a
23 certain concentration of green house gases in the
24 atmosphere and so regardless of whatever mitigation
25 we are able -- greenhouse gas mitigation we were

1 able to implement, we wouldn't expect at this, at
2 least, that there would be much of a change in the
3 projections prior to 2060.

4 And again, we want to make sure that this
5 information is out there. So we're recommending
6 full and complete transparency.

7 All four counties are currently in the process
8 of providing the projection and the document to
9 their boards to get acceptance of this as our
10 future planning projection.

11 And, the other thing that is important to
12 note, this is sea level rise. But, certainly,
13 extreme events are going to have a very significant
14 impact on the community. So this is something that
15 we need to continue to plan for and, perhaps, take
16 a close look at when we're looking at the
17 projections and the association with storm surge.

18 Next slide.

19 So as far as what's going in the county many
20 of you may know that we've had a lot a new
21 legislation passed at the county level.

22 In 2014, in addition to the resolution that
23 created the Miami-Dade Sea Level Rise Task Force we
24 also had two pieces of legislation that required
25 that the county consider sea level rise in the

1 infrastructure planning.

2 And then, the task force provided the report
3 to the board in 2014.

4 So, in January of 2015, the recommendations
5 that were provided in that report were then
6 translated into, actually, seven different
7 resolutions. One was an urging to continue
8 Everglades restoration.

9 But these are the ones that my office has
10 currently -- has been working on for the last year.
11 We have reports. We've had quarterly updates on
12 the progress that we've had to provide to the
13 board.

14 The final reports are due -- The first one for
15 the adaptation action areas, that final report was
16 already produced and it's available.

17 The rest of them on the Climate Change
18 Advisory Task Force recommendations, the enhanced
19 capital plan, continuation and further funding of
20 the Environmentally Endangered Lands Program, work
21 on a more comprehensive flood risk study with our
22 regional partners including the district and,
23 finally, a report on the discussions that we've
24 initiated with the insurance sector. Those are all
25 due.

1 We are anticipating that those will be put to
2 the board or forwarded to the board from the Mayor
3 next month, in March.

4 And so, I would offer that these will be,
5 certainly, informational documents that might
6 inform and help this committee. And we, of course,
7 will be happy to provide them as soon as they are
8 presented to the board. They will be fully
9 available and we'll be happy to come back and
10 present or answer any questions on this.

11 Next slide, please.

12 And, I just wanted to mention that the updated
13 sea level rise projection has already been put into
14 action by our Water and Sewer Department.

15 You can't really see it. But, that top left
16 document was actually a vulnerability assessment
17 report on infrastructure that was done by Hazen and
18 Sawyer for Water and Sewer in 2013.

19 So they have been looking at this for some
20 time despite what you see in the papers. And they
21 are now, as part of the Ocean Outfall Multi-Billion
22 Projects they're going to be implementing over the
23 next ten years, they contracted CH2M Hill to do a
24 vulnerability assessment of the existing and newly
25 projected projects, particular the waste water

1 treatment plants.

2 And, I'm sorry that you cannot see that chart.
3 But, I'd be happy to provide the presentation.

4 But, they incorporated the update even before
5 the update was formally published and that was
6 something that myself and Dr. Virginia Walsh with
7 Water and Sewer pushed very hard for.

8 The consultants were very anxious to get
9 started on the planning and putting together the
10 projects and we insisted that they wait until the
11 projection was available. And, we had the numbers
12 of the projection; but, the guidance document had
13 been quite released yet. We were able to get them
14 to wait until we, at least, had those numbers and
15 they incorporated that into the planning for these
16 new capital projects.

17 So with that, I'll be happy to answer any
18 questions.

19 CHAIR PATHMAN: Thank you, Nicole. I
20 appreciate your presentation.

21 I have a question in terms of how either the
22 Compact or the county would advise, let's say, if
23 someone -- a developer developing a shopping center
24 or something and you have all of this information
25 that you've shared concerning -- is it going to be

1 planned for two feet, four feet, six feet. The
2 developer says to the attorney, in this case
3 sometimes me, what do I plan for? How do I build?
4 How do I design?

5 I'm sure Reinaldo gets those same questions.

6 And, you know, I might say, well, plan for the
7 worst and hope for the best and plan for four feet.
8 Well, that will cost me too much and the code
9 doesn't require me to do it.

10 MS. HEFTY: Uh-huh.

11 CHAIR PATHMAN: How is the county or the
12 Compact going to address that; because, for Miami,
13 for instance, you know, it is going through its
14 grayest urban renewal right now. Evaluations that
15 are unprecedented. And, nothing is being built --
16 I shouldn't say nothing. But, things are not being
17 built in terms of taking into consideration sea
18 level rise.

19 So, how do we, you know, work with the
20 development or business community and tell them
21 when they say, well, the county doesn't require it,
22 the city doesn't require it --

23 Is the Compact going to come out with a
24 recommendation or is the county going to come out
25 with a recommendation that this is what we should

1 do?

2 MS. HEFTY: Well, again, the guidance document
3 provides some guidelines. And, I think one of the
4 biggest issues with regards to that question is
5 whether that investor is building something to sell
6 immediately and so they don't care whether their
7 investment is here thirty or forty years from now
8 versus if it's something that they're building and
9 they're going to be responsible for the next thirty
10 to fifty plus years then it's looking at those
11 questions that I mentioned.

12 You know, how vulnerable is the infrastructure
13 going to be? What are the different things they
14 can do to adapt that infrastructure to rising sea
15 levels and more frequent inundation and how much
16 does that cost?

17 And they're going to have to, you know, really
18 -- You know, I don't know that you can answer those
19 questions. It might an engineer and an economist
20 that say, okay, you know, here are your losses if
21 you choose to design this infrastructure to the
22 lower level. So, it's not going to cost you this
23 much now. But, if it should become inundated on a
24 frequent basis or fail for some reason these are
25 the subsequent costs that you're going to incur.

1 And, they're going to have to make that decision of
2 whether they feel it's worth that investment now,
3 ahead of time, to avoid those additional costs.

4 I agree that it would be helpful if we had
5 mandatory codes at this point. But, I think that
6 we all know that that's something that we need to
7 work with the private sector in developing. We
8 need to have those stakeholder meetings so that we
9 get the buy-in; because, we all know that it's
10 going to cost, obviously, money.

11 And so, I think the county is focusing on how
12 do we set the example.

13 So part of the work that we're doing is
14 developing that process for considering sea level
15 rise in our capital planning and that can be used
16 as an example for others.

17 The City of Fort Lauderdale, as Mayor Lerner
18 mentioned, they've already got their adaptation
19 action areas in process.

20 We're going to be doing several pilots this
21 summer; so that will help inform the process.

22 And so, I think, you know, the best thing we
23 can do now is provide as much information and
24 guidance to help them make the best decision,
25 economically, for them, whether it's in the short-

1 term or the long-term.

2 CHAIR PATHMAN: I noticed, also, that in one
3 of the pieces of legislation the county is looking
4 at is about insurance.

5 MS. HEFTY: Uh-huh.

6 CHAIR PATHMAN: How much of the information
7 that the re-insurance or insurance industry is
8 sharing with the county you're taking into
9 consideration or, for that matter, the Compact, in
10 terms of what's going to be insurable, in terms of
11 what you're saying or how high sea level will get;
12 because, at the end of the day, developers,
13 homeowners, are going to have to do what the banks
14 and the insurance companies say. Not necessarily,
15 what the county says.

16 So, how are the two working together?

17 MS. HEFTY: Well, we had a meeting last month,
18 actually; and we had several presentation and we
19 asked those questions.

20 What can we be doing? We want to -- You know,
21 we're -- We know this is an issue. We want to
22 address. How long? We want to prepare for the
23 future. And, frankly, we didn't -- Obviously, we
24 didn't get any specific guidance.

25 So, I think it was, kind of, beginning that

1 conversation and getting some of the business
2 community aware of that.

3 So one of the things we're going to be doing,
4 in the county, is some of those models that they
5 use to determine the risk, we're going to be
6 applying to some of our own insurance.

7 And so, for example, right now, the county
8 does insurance for windstorm; but, we need to look
9 at more of the flooding aspect. So, we're going to
10 be looking at the insurance companies that work
11 with the county directly and asking them to run
12 some of those models for our own infrastructure.

13 So, I think, we're looking at how can we
14 inform our own process while we're having those
15 conversations with the private sector.

16 I don't know if it's that they're not sure
17 themselves or they're reluctant to provide some of
18 those answers.

19 I think that this -- You know, I'm not sure
20 how many communities are asking them these tough
21 questions.

22 So, I think that we've started the
23 conversation.

24 The Mayor is very engaged and wants to really
25 get more answers so that we can move forward as a

1 community and try to decrease that risk.

2 CHAIR PATHMAN: Okay. Thank you. And
3 Reinaldo, you had a question?

4 MR. BORGES: Yes. Thank you, Nicole. And we
5 don't take for granted your incredible persistence
6 with all of the issues at the county and assisting
7 as you have the task force that has developed all
8 of these great ideas.

9 I mean, we participated in the -- in the
10 Regional Climate Change Compact multiple times.

11 As an Architect, I would, sort of, walk away,
12 sort of, saying, well, first of all there were very
13 few architectural minds in the meeting.

14 Typically, it's a lot of planners, a lot of
15 public works directors and politicians and so on.

16 One of the things that always concerned the
17 people that we do work for is, sort of, the idea of
18 certainty.

19 You know, as you know, for developers
20 certainty is very important because it affects the
21 risk, their assessment of the viability of their
22 project.

23 So, the challenge -- and I've, sort of,
24 discussed this with other scientists and I would
25 ask Dr. Enfield to, perhaps, get into this idea

1 that the uncertainty factor is always of great
2 concern. And, when I see the work of this
3 committee for the Compact, at the end of the day,
4 there seems to be, sort of, trying to, sort of,
5 balance what some of these higher end projections
6 are.

7 And, we had Dr. Wanless here at the last
8 meeting and every time I listen to his presentation
9 I get reminded that, you know, it could be quite
10 catastrophic and that no scientist could really say
11 it is or it won't be. That there are so many
12 dynamics in the way that the ice is behaving and
13 that the temperature is incremental as well. And,
14 all of these different factors.

15 So, you know, six feet in a hundred years
16 that's, sort of, the current, more or less, balance
17 of these projections.

18 When we talk to our clients and people that
19 are, sort of, trying to invest in projects in a
20 certain period of time we understand that it's
21 difficult to, sort of, say, well, it's going to be
22 three feet in fifty years no matter what. You
23 know, I'll put my seal on that.

24 That's always a challenge.

25 When we modified the South Florida Building

1 Code for windstorm, as you know, we're designing
2 for very sustained winds that were, sort of,
3 predicable and I think scientifically more certain,
4 you know, to design for.

5 The biggest challenge that we find as
6 designers, with sea level rise, is that, you know,
7 somehow even though, as you said, the minds and the
8 individuals and the expertise involved in this
9 committee are significant and everybody is really
10 trying to pull their best knowledge, you know, to
11 kind of give this advice, at the end of the day,
12 you know, every time a report comes out -- IPCC
13 comes out, this report comes out, it's always
14 incremental. You know, it has never really gone
15 down. You know, I think the chart keeps on going,
16 In that beautiful curve, up.

17 So, you know, we tend to represent investors
18 and developers and city builders that, typically,
19 are looking at their in and out into a project in a
20 short-term basis.

21 Typically, a lot of these investors are not
22 looking at an investment for fifty or sixty or a
23 hundred years.

24 MS. HEFTY: Uh-huh.

25 MR. BORGES: So the challenge becomes for the

1 design professionals and the code modification at
2 county and then in all of the other municipalities
3 is to really do it in a way that doesn't get as
4 politicized as perhaps it does. And then, that
5 seems to be an impossibility; because --

6 I mean I could say that because I'm not, you
7 know, working for a municipality. But, I know that
8 it's difficult for, you know, someone that has a
9 history that you have with the county to, sort of,
10 understand that what it really takes to make
11 revolutionary change in our standards -- what we
12 built the physical city from every day -- is so
13 complex from the political side.

14 MS. HEFTY: Yeah.

15 MR. BORGES: I mean a good friend told me that
16 the only science that really works in county hall
17 is political science. Is that true?

18 So, you know, I think that's the biggest
19 challenge. It's that it doesn't really matter the
20 expertise of oceanographers and people that really
21 understand all of the dynamics of what happens to
22 our planet. At the end of the day, the concern is
23 how do we change the way that we're building our
24 cities?

25 And, you know, I go away from all of these

1 Compacts, sort of, feeling, kind of, empty; that,
2 at the end of the day, nothing that happens in
3 these events is changing in any rapid form the work
4 that design professionals are doing every day.

5 And, I don't know how we change that.

6 Do you have an insight on that? I don't want
7 to put you on the spot; but, you know, that seems
8 to be the biggest challenge -- is that how does all
9 of this information, you know, relate to the way
10 that the private section is doing what they do?
11 Because, you know, one can, sort of, believe that
12 with the good work that yourself and Virginia are
13 doing -- that, you know, Water Management and the
14 things that the county is doing now, perhaps, is as
15 intelligent as it's ever been, you know, in terms
16 of projecting and investing tax dollars in an
17 intelligent way -- Because, you know, if we don't
18 -- I mean we see all kinds of public work projects
19 that are under-designed right now and they're still
20 going forward.

21 So, I mean, from the built environment side, I
22 just don't know if you could, sort of, give a sense
23 of certainty to something that is so uncertain;
24 because, you know, six feet in a hundred years we
25 can plan for. And, you know, some of us, of

1 course, won't be around to really evaluate whether
2 we had the right projections or not. But, I am
3 just concerned that these things --

4 You know, in the interest of investing into
5 the city and its future that they kind of fall
6 short.

7 But, I don't know that there's a valid
8 solution to that; because, you know, there seems to
9 be a, sort of, conservative approach to these
10 projections in a certain way even though it's based
11 on good science.

12 MS. HEFTY: As I mentioned there was a wide
13 spectrum of views in the workgroup of, you know,
14 where we should be on the projection. And, because
15 we want this to be guidance that can be defended,
16 to the best extent possible, that's why we have the
17 different curves. And so, right now, we --

18 As I mentioned and we all know, the science is
19 constantly changing. We're going to be continuing
20 to get updated information. The models are, you
21 know, hopefully, going to improve with that updated
22 information. And so, that's why it's important
23 that we revisit this on a regular basis.

24 And I'll just point out that when the Compact
25 was first formed it was formed because the counties

1 had their own committees. They had their own
2 projections and they weren't anywhere close in some
3 cases.

4 So, I think we've come a long way from that
5 point. And so, I understand your frustration. I'm
6 there with you and we don't have a crystal ball.
7 So, I think, the only thing we can continue to do,
8 at this point, is continue to hone in on, you know,
9 trying to close the gap in that curve to the best
10 that we can with the information we have available.

11 And, you know, again, that orange curve which
12 was well above was put there because some folks
13 feel very strongly that, you know, we are going to
14 see a very significant increase in the rate and the
15 amount of rise. And so, they wanted that
16 information there.

17 And what I didn't mention, when I was talking
18 about what Water and Sewer is doing, is they used
19 the orange curve for these projects that they're
20 planning to 2075.

21 So, again, it's looking at, you know, the
22 criticality of what you're building and what you
23 can afford to do now versus what you can't afford
24 to lose in the future.

25 And, I hope that the work that we're doing at

1 the county level and the municipal level will
2 continue to inform that process.

3 But, we do need to have these conversations
4 because, you know, we are going to have to make
5 code changes and they're not going to be, probably,
6 very favorably anticipated. So, it's something
7 that we're going to have to work together to be
8 able to, kind of, provide that.

9 MR. BORGES: Has any of this affected planning
10 and zoning at the county level yet, in terms of
11 changing standards in planning and zoning at the
12 county level?

13 MS. HEFTY: Well, one of the things we're
14 doing is looking at --

15 One of the things I didn't mention is we have
16 the integrated ground water/surface water model
17 that Dr. Virginia Walsh worked with USGS (United
18 States Geological Survey) and that's important
19 because it's going to help us better understand the
20 response of the ground water to various sea level
21 rise scenarios and various precipitation events.

22 So, we're going to be incorporating the
23 information from that model into our storm water
24 master planning process.

25 Unfortunately, that's not something that we do

1 in a few months time. It's going to take some time
2 to update the basins and get that information.

3 But, I think that will be a piece that will
4 really help us better understand what parameters
5 we're looking at as far as inundation, the length
6 of inundation and the amount of inundation.

7 And again, we have to remember that we've
8 always got to be prepared for the storms; because,
9 sea level rise is a gradual threat. A storm surge
10 is something that, you know, we didn't have very
11 much of with Hurricane Andrew; but, could have a
12 significant impact the next time that we experience
13 that. So that's something that --

14 For example, when Water and Sewer and CH2M
15 Hill did the analysis, they incorporated surge into
16 that and that's why they chose to use their upper
17 level projection.

18 CHAIR PATHMAN: Does anybody else from the
19 committee have any questions for Nicole?

20 Does anybody from the audience have any
21 questions?

22 UNKNOWN SPEAKER: I just have a quick one,
23 just to confirm.

24 CHAIR PATHMAN: Okay.

25 UNKNOWN SPEAKER: You're saying that the water

1 and sewer bond that was passed recently, they used
2 the NOAA -- the orange curve?

3 MS. HEFTY: For the waste water treatment --
4 the big projects that they' planning and they'll be
5 upgrading and developing, yes; they did.

6 MR. REGALADO: Okay. Thank you.

7 CHAIR PATHMAN: Thank you very much, Nicole.
8 We appreciate your time and appreciate your being
9 here.

10 MS. HEFTY: And again, please don't hesitate
11 to contact me or our office for any additional
12 information we can provide. And again, the
13 reports, we hope, will be out in March.

14 CHAIR PATHMAN: Thank you very much.

15 MS. HEFTY: Thank you.

16 UNKNOWN SPEAKER: Thanks.

17 CHAIR PATHMAN: Committee members, I'd like to
18 see, in light of what Nicole has shared with us and
19 some of the earlier discussion, that, maybe, we can
20 get our esteemed Assistant City Attorney there to
21 do an analysis of the legislation that the county
22 has proposed, what they have passed to date and
23 what they hope to pass so that we can look at it;
24 because, one of our mandates is to incorporate
25 things from the county and what the county does to

1 consider them.

2 And then, maybe, when we have our next
3 workshop or meeting here with the staff members of
4 Planning and City Manager's Office and so on we can
5 have a discussion about those items so we don't end
6 up, either, repeating them or we look at the ones
7 that are most helpful or the ones that are not.

8 The city may have its own opinion about some
9 of the things that the county is looking at.

10 And then, you know, we can actually not
11 re-invent the wheel; but, actually, maybe, with the
12 Manager's help and the commission get something
13 passed that's meaningful like the county has done
14 or adopt some of the things that the county has
15 done.

16 So, does anybody have any comment on that from
17 the committee?

18 Does anybody thing it's a good idea?

19 MR. BORGES: Yes, I think so. I mean I think
20 that -- I think what Nicole brings to light is the
21 fact that the county is doing a lot of good work.
22 The Compact is doing great work. There's a lot of
23 integration between all of the communities.

24 My personal experience, on a daily basis, in
25 some of these municipalities is a little bit

1 different than what may be perceived, which I think
2 a lot of it has to do with the process of going
3 from reports into actual ordinances that lead to
4 change in regulations.

5 What I think I heard from Nicole is that, at
6 the moment, the county Planning and Zoning
7 Department is really not requiring any changes to
8 the way that, you know, physical buildings or
9 surface lots or anything like that are designed in
10 terms of elevations from the requirements from, you
11 know, FEMA or otherwise.

12 MS. HEFTY: But, that's actually not the
13 planning division. With regards to elevation, you
14 know, that's from the code and our storm water
15 planning folks. So, one of the things that they'll
16 be looking at is base flood elevation standards and
17 that will, probably, be one of the first things
18 that we look at revising.

19 So, the planning folks really look at land
20 use.

21 MR. BORGES: Right.

22 MS. HEFTY: And so, I guess what I didn't
23 finish when I was talking about the modeling is
24 that information will be looked -- will be used to,
25 kind of, look at areas that will be further

1 inundated in the future and do we need to look at
2 changing the land use for those areas.

3 MR. BORGES: I guess the way I see it is that
4 you're right; but then, Planning and Zoning
5 determines the height of things and where things
6 are from. So, that data line that gets established
7 by the engineers and the public works standards and
8 so on, they do affect the way that Planning and
9 Zoning then, sort of, takes it from there.

10 MS. HEFTY: Correct, the zoning folks.

11 MR. BORGES: And that there needs to be some
12 kind of conversation between both; because, you
13 know, I, sort of, see the lack of integration
14 sometimes in some --

15 MS. HEFTY: They're working on that.

16 MR. BORGES: Because, sometimes they don't
17 communicate with each other and, you know, you
18 don't -- Hopefully, you're having conversations
19 internally that is more --

20 MS. HEFTY: We have been.

21 MR. BORGES: -- integrated and more inclusive.

22 MS. HEFTY: Correct.

23 CHAIR PATHMAN: I want to try to move along.

24 We could sit here and discuss these issues ad
25 nauseam as we have with you Nicole and with

1 Reinaldo and I on the different committees that we
2 sit on related to sea level rise.

3 But, I'd like to make a motion that we have an
4 analysis done by our esteemed staff of the
5 legislation passed so far by the county and their
6 pending legislation and report back to this
7 committee so we could discuss it and see if we want
8 to make a recommendation in a joint meeting with
9 the department heads and, maybe, even before the
10 commission on those findings.

11 Anybody second that motion?

12 VICE CHAIR CALE: And I would just like to add
13 to that, it would be really useful if you can make
14 it clear where there are recommendations that are
15 enforceable or have something -- some like
16 implementation mechanism behind them versus things
17 that are just recommendations.

18 I think that will help us moving forward, too;
19 since we're hoping to make recommendations in
20 general. But also, things that we really hope that
21 the city commission will take up and then implement
22 in some real tangible way.

23 CHAIR PATHMAN: Matt, did you, kind of,
24 understand the craziness of the two comments?

25 MR. HABER: I do.

1 CHAIR PATHMAN: Okay. Very good. So, do I
2 have a second?

3 MR. GOMEZ: Second.

4 CHAIR PATHMAN: Second from Pete. All of
5 those in favor say aye?

6 (Thereupon, responses were heard in the
7 affirmative.)

8 CHAIR PATHMAN: And, all of those opposed?
9 (Thereupon, no responses were heard.)

10 CHAIR PATHMAN: Any abstentions?
11 (Thereupon, no responses were heard.)

12 CHAIR PATHMAN: Seeing none, the motion
13 passes. Thank you.

14 Thank you again, Nicole.

15 We have one last item on our agenda which,
16 kind of, dovetails into all of the things that
17 we've been talking about tonight and that is --
18 It's under our new business.

19 Recently, I participated in a -- and Nicole
20 did as well -- in an event by AECOM where three --
21 two cities and the county were present to discuss
22 issues related to sea level rise. And, I think it
23 would be a good idea if this committee propose to
24 the manager or the commission that we have some
25 workshops, at least one or two a year, with the

1 other cities -- some of the other cities, not just
2 Miami Beach and Miami and Miami-Dade County, but to
3 gain information so we can hear, you know, what's
4 going on their cities; maybe, even what's going on
5 in other counties like Broward or the City of Fort
6 Lauderdale.

7 I think it would be good to engage, you know,
8 their professionals, their staff.

9 As Reinaldo has pointed out, you know, the
10 City of Miami does not currently have a lot of
11 staff that's dealing with this issue and we hope to
12 encourage -- It was part of our annual report to
13 the commission and the manager to encourage
14 creating a staff to help Ajani and Matt.

15 So, I think that -- And, we can have some
16 discussion -- that we should have some, kind of,
17 you know, workshop first with the commissioners and
18 the City Manager to discuss this idea. And then,
19 invite, you know, some of the leaders and
20 administrators of some of the other cities -- not
21 all at once -- so that we could have some
22 continuous dialogue.

23 I think when Mayor Lerner was here, you know,
24 one of the things that she's faced with, as a small
25 city, is trying to implement a program that's cost

1 efficient for her city for which they probably have
2 no funds.

3 So, maybe, cities need to look to work
4 together and do P-3 projects and look to the county
5 to find money.

6 And, eventually, I think that the government
7 -- the federal government will look at this
8 somewhat like triage. The places that need it most
9 and have the most economic risk in terms of
10 valuation may get resources first.

11 And by coordinating our efforts I think we
12 stand a better chance of, you know, directing that
13 to Miami; because, we are the biggest city in the
14 State of Florida.

15 Yes, Tabitha?

16 VICE CHAIR CALE: I think that's a great
17 suggestion and I might want to -- I think I would
18 like to get the Assistant City Manager's input.

19 I think it might make the most sense for us to
20 wait to have some sort of workshop until after he
21 can generate the report he mentioned or depending
22 on the time line of how long that would take.

23 That way we might be able to get a sense of
24 what the city is already doing or thinking and then
25 can have that in our minds and we can compare with

1 what other cities are working with.

2 CHAIR PATHMAN: Well, I'd like to see us pass
3 something tonight to encourage --

4 VICE CHAIR CALE: Oh, sure.

5 CHAIR PATHMAN: -- the city to --

6 VICE CHAIR CALE: I definitely think we could
7 --

8 CHAIR PATHMAN: Okay?

9 VICE CHAIR CALE: -- pass something.

10 CHAIR PATHMAN: And we can always adjust our
11 time frame --

12 VICE CHAIR CALE: Right.

13 CHAIR PATHMAN: -- according to what the
14 manager advises us or the commission. But, I agree
15 with you. But, let's push this. I think --

16 VICE CHAIR CALE: Sure.

17 CHAIR PATHMAN: -- there is a lot of
18 opportunity to work with other cities and it will
19 put us in a position to learn about what's already
20 being done, maybe, somewhere else that we don't
21 know or that we're not aware of.

22 VICE CHAIR CALE: Yeah. Okay. I think my
23 only point was that it might be really useful for
24 us to have a clear sense of what the city is doing
25 ahead of time -- ahead of that workshop so we can

1 then have a better basis of comparison with the
2 work of other cities.

3 But, I absolutely agree with you.

4 CHAIR PATHMAN: Yeah. Actually, I think we
5 discussed that earlier and that's what the
6 manager's office is going to do.

7 So, we'll have that in place.

8 But, this is to encourage, again, two things.
9 One, meeting internally with commissioners and the
10 City Manager and the members of this committee and
11 the departments with the city. And then, reaching
12 out to other cities and primarily Miami-Dade County
13 or even Miami Beach because they've already
14 implemented programs and let's see what they're
15 doing and have some dialogue with them.

16 So, do the other committee members -- anybody
17 else have any comments on that?

18 MR. GOMEZ: I agree. I was actually on the --
19 I was going to prepare for the trip that I took to
20 Paris, for the forum, a larger report and I just
21 wanted to comment. It was, pretty much, along
22 those same lines.

23 I met with the Mayor of Portland, of Austin,
24 of New Orleans as well as other countries in Africa
25 and in Europe and, kind of, started to do an

1 exchange.

2 And, the thing that actually worried me most
3 about that is most of the people are looking to
4 Miami to be the example for the entire world.

5 That was my take away.

6 CHAIR PATHMAN: That's partially true. I mean
7 I hear that all of the time and it's been in the
8 various periodicals that I've been quoted in as
9 well, that Miami needs to take a lead.

10 Reinaldo, you had a comment?

11 MR. BORGES: Yes. So, I think we should look
12 at other cities. And, for example, Miami Beach has
13 been very advanced, you know, in integrating
14 recommendations from the blue ribbon panel into
15 planning and zoning items. And then, they get
16 taken through the Land Use Development Committee,
17 which is formulated as we know from commissioners
18 that are appointed by the Mayor to really take it
19 into ordinances and modify code.

20 However, a lot of this has been informed by
21 the good work that their professional has been
22 doing; AECOM, in this case.

23 So, all I say is, is it possible or is it
24 already in the works that the City of Miami is
25 searching for a consultant that may actually --

1 CHAIR PATHMAN: Before we get to that, there's
2 a motion pending. I'd like to, you know, get a
3 second and then get that approved and then we can
4 discuss this issue.

5 MR. REGALADO: I'll second it.

6 CHAIR PATHMAN: Jose will second it. All of
7 those in favor say aye?

8 (Thereupon, responses were heard in the
9 affirmative.)

10 VICE CHAIR CALE: I --

11 CHAIR PATHMAN: Tabitha?

12 VICE CHAIR CALE: I would just like to add,
13 maybe, we should just consider wrapping things up
14 and moving the next conversation to the next
15 meeting since we're, kind of, running far behind.

16 CHAIR PATHMAN: Well, we've got a motion
17 pending and then we can take that up.

18 All of those opposed?

19 (Thereupon, no responses were heard.)

20 CHAIR PATHMAN: Any abstentions?

21 (Thereupon, no responses were heard.)

22 CHAIR PATHMAN: Seeing none, the motion
23 passes.

24 Reinaldo, did you want to quickly finish what
25 you were saying about Miami Beach, in just one

1 minute. Because, other than that, we can open it
2 to the public or otherwise we're adjourned.

3 MR. BORGES: I think we continue it at the
4 next meeting.

5 CHAIR PATHMAN: Okay, very good. All right.
6 So we'll put that on the agenda, please; Ajani.

7 If you would address with Ajani what item you
8 want to it to be so we know today. What do you
9 want to discuss?

10 MR. BORGES: I think we need to look at best
11 practices from other municipalities. You know, in
12 the case of Miami Beach, you know, look at what
13 they're doing and how they're integrating
14 resiliency and sustainability and taking that into
15 ordinances that actually affect the way that things
16 are getting regulated in building and planning and
17 zoning and so on.

18 So, just kind of look at what's happening in
19 the neighborhood. Not necessarily go to far away
20 places. But, you know, who is doing what in the
21 neighborhood, in the region, you know.

22 Fort Lauderdale, for example, was noted today
23 as being someone that, maybe, we should be learning
24 from and they have taken a lot of initiatives.

25 So that's just, sort of, looking at case

1 studies from other cities that we can learn from as
2 a committee and to inform the leadership of Miami.

3 MR. STEWART: (Indiscernible). You had
4 mentioned something about a consultant or some --

5 CHAIR PATHMAN: We'll bring that up at the
6 next meeting. We've discussed that in our report
7 to the manager and to the commission. That's in
8 there. So, I don't think we need to review that
9 again.

10 Is there anybody from the public that would
11 like to make any comment on anything that we've
12 discussed?

13 Seeing none, thank you everybody for attending
14 and our meeting is adjourned.

15 (Thereupon, the proceeding was adjourned.)
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CERTIFICATE OF COURT REPORTER

THE STATE OF FLORIDA:

:ss.

COUNTY OF MIAMI-DADE:

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 9th day of March, 2016

Nick Bruens

Typist

NBR/IMG

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