
Committee Meeting

of

SENATE ENVIRONMENT AND ENERGY COMMITTEE
and
ASSEMBLY ENVIRONMENT AND SOLID WASTE COMMITTEE

“The Committees will receive testimony from invited speakers concerning the need for investment in storm resilient infrastructure in the State”

LOCATION: Lavallette Municipal Building
Lavallette, New Jersey

DATE: August 13, 2026
10:00 a.m.

MEMBERS OF COMMITTEE PRESENT:

Senator Bob Smith, Chair
Senator John F. McKeon
Senator Carmen F. Amato, Jr.
Senator Latham Tiver

Assemblyman James J. Jennedy, Chair
Assemblywoman Alixon Collazos-Gill, Vice Chair
Assemblyman Ravi S. Bhalla
Assemblyman Michael Inganamort



ALSO PRESENT:

Madelynn Correnti
Christina Denney
Patrick Raya
*Office of Legislative Services
Committee Aides*

Celia Smits
*Senate Majority
Committee Aide*

Thea Sheridan
*Senate Republican
Committee Aide*

Elizabeth Theodore
*Assembly Majority
Committee Aide*

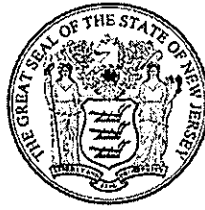
Brett Philip
*Assembly Republican
Committee Aide*

***Meeting Recorded and Transcribed by
The Office of Legislative Services, Public Information Office,
Hearing Unit, State House Annex, PO 068, Trenton, New Jersey***

Bob Smith
Chair

Linda R. Greenstein
Vice-Chair

John F. McKeon
Parker Space
Latham Tiver



Madelynn K. Correnti
Eric Hansen
Office of Legislative Services
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SENATE ENVIRONMENT AND ENERGY COMMITTEE

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COMMITTEE NOTICE

TO: MEMBERS OF THE SENATE ENVIRONMENT AND ENERGY COMMITTEE
FROM: SENATOR BOB SMITH, CHAIRMAN
SUBJECT: COMMITTEE MEETING - AUGUST 13, 2026

The public may address comments and questions to Madelynn K. Correnti, Eric Hansen, Committee Aides, or make bill status and scheduling inquiries to Melissa Berrios, Secretary, at (609)847-3855 or e-mail: OLSAideSEN@njleg.org. Written and electronic comments, questions and testimony submitted to the committee by the public, as well as recordings and transcripts, if any, of oral testimony, are government records and will be available to the public upon request.

The Senate Environment and Energy Committee and the Assembly Environment and Solid Waste Committee will meet jointly on Thursday, August 13, 2026 at 10:00 AM in the Lavallette Municipal Building, 1306 Grand Central Avenue, Lavallette, New Jersey 08735.

The committees will receive testimony from invited speakers concerning the need for investment in storm resilient infrastructure in the State.

A limited number of parking spots will be available to attendees at the Lavallette Volunteer Fire Company Station 69 - 125 Washington Avenue, Lavallette, New Jersey 08735.

Issued 8/6/26

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NEW JERSEY LEGISLATURE
ASSEMBLY ENVIRONMENT AND SOLID WASTE
COMMITTEE

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COMMITTEE NOTICE

TO: MEMBERS OF THE ASSEMBLY ENVIRONMENT AND SOLID WASTE
COMMITTEE

FROM: ASSEMBLYMAN JAMES J. KENNEDY, CHAIRMAN

SUBJECT: COMMITTEE MEETING - AUGUST 13, 2026

The public may address comments and questions to Christina Denney, Patrick Raya, Committee Aides, or make bill status and scheduling inquiries to Melissa Berrios, Secretary, at (609)847-3855 or e-mail: OLSAideAEN@njleg.org. Written and electronic comments, questions and testimony submitted to the committee by the public, as well as recordings and transcripts, if any, of oral testimony, are government records and will be available to the public upon request.

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SENATOR BOB SMITH (Chair): So, we're ready to get started.

A couple of opening announcements. First, through the kindness of Mayor LaCicero, we have some more chairs coming. Also, he has personally cranked up the air conditioning-- (applause)

SENATOR SMITH: --so that we don't get too hot.

Mayor LaCicero, will you come on up and welcome us to your gorgeous, beautiful town? (applause)

MAYOR WALTER G. LaCICERO: Thank you, Senator.

Welcome, Committee. I do have it written down as a joint committee; I understand the Environment and Energy Committee of the Senate, and the Environment and Solid Waste Committee of the Assembly.

I want to welcome all the members of the Committee, their staff, and all the interested organizations that are here looking out for their own interests.

Welcome to Lavallette; I believe this town is the epitome of the Jersey Shore, especially on a day like today. I do encourage everyone, after the meeting, to take a short walk up the street and see what the Jersey Shore is really about.

I don't understand how Lavallette is not voted *the* best beach in the country, if not the world. Go up there; our sand is clean, white, and soft. That water is gorgeous, and a lot of that has to do with the work of the State in enacting environmental laws designed to protect this environment.

I've been here my whole life, and I can remember back in the day when oil tankers used to dump their sludge, and we'd get tar balls on

the beach. I remember seeing garbage barges on fire out on the horizon and seeing some of the debris come washing in thereafter. I remember hypodermic needles on the beach.

SENATOR SMITH: Yep.

MAYOR LaCICERO: I remember seeing different colored waves when Ciba-Geigy accidentally -- or, maybe not so accidentally -- dumped some chemicals into that ocean out there.

Since these new laws have been enacted, this environment is a totally different place. And, it was difficult to catch fish back in the day; right now, it is so clean, there's fish everywhere. You can go up there in the fall and watch whales migrating. You can see tuna fish -- 300 pounds -- clearing the water. It's an incredible place right now, and that's thanks to the environmental laws that have been enacted in the last probably 50 years.

Lavallette does not rely solely on the State to enact those kinds of legislation. We are very, very active in environmental issues here. We supported Save Barnegat Bay; Reclam the Bay; Clean Ocean Action; and, we're part of the beach sweeps on an annual basis and have been since that program's inception. And, even local people here encourage us to pass ordinances to enhance the environment here. We, in fact, passed a plastic utensil ordinance before the State even considered doing that. So, we're very happy about that. We have passed an ordinance that requires contractors to cover their Dumpsters, because the wind takes the debris; spreads it all over the environment and into the ocean; and we've got about 99% compliance there. And, currently, we are working on a new ordinance with the microplastics from these (indiscernible) being cut.

So, Lavallette is very, very active. We understand the need for strong environmental laws. Take a look around you: This *is* the epitome of the Jersey Shore. Go up and check out our sands later on. If you happen to see Senator Smith's home over there, you can enjoy the views of the Barnegat Bay. And, if you're here that late in the afternoon, please go to our bayfront where you will see the most outrageous sunsets ever.

SENATOR SMITH: Yes.

MAYOR LaCICERO: It's a perfect day for it; there's no clouds.

So, welcome everyone, and we got the air turned down for you. It's a good crowd; we do have some extra chairs.

If there's anything anybody else needs, please give us a call.

SENATOR SMITH: Thank you, Mayor. (applause)

SENATOR SMITH: So, two other pre-committee announcements.

First is that whatever you say is being recorded by a court stenographer. And, the reason for that is that we're going to give the transcript of this meeting to the rest of the Assembly, the rest of the Senate, and to the front office -- the Governor's staff -- in support of what we're proposing today.

And, secondly, I have been advised by the Mayor and former Senator John Bennett, who is the Business Administrator here, that the unique shape of this ceiling means that every little whisper can be heard across the room. So, for legislators, I know you never say anything untoward; public, however, gets a little wild and raggedy. So, be careful what you say, because everybody -- people you don't know -- can hear what you're saying. Be careful out there.

Let me introduce Assemblyman Jim Kennedy, who is the Chairman of the Assembly Environment and Solid Waste Committee. I hope you would introduce your members.

Chairman.

ASSEMBLYMAN JAMES J. KENNEDY (Chair): Sure.

OK. I should have brought my glasses.

SENATOR SMITH: You can have my glasses.

ASSEMBLYMAN KENNEDY: Yes; see if they work.
They're pretty good.

SENATOR SMITH: Pretty good.

ASSEMBLYMAN KENNEDY: Vice Chair Alixon Collazos-Gill; and Ravi Bhalla; Michael Inganamort; and, Gregory Myhre.

SENATOR SMITH: Thank you, everybody, for coming.

And, on the Senate side -- let me get my glasses back. (laughter)

On the Senate side, we have--

ASSEMBLYMAN KENNEDY: They worked pretty well--

SENATOR SMITH: --we don't have yet, but we will have shortly, Senator John McKeon; Senator Latham Tiver; and, as a substitute today, Senator Carmen Amato, who is also the senator from--

SENATOR AMATO: Ocean County.

SENATOR SMITH: Ocean County, and who has a very strong interest in what we're doing today.

So, that being said, let's get to it.

The point of today's hearing is to take a look at New Jersey and what we need to do to "harden" its infrastructure. You turn on cable television -- or any television -- every night, every day -- in fact, this

morning, we woke up to more of it. Every part of this country and the world is getting crushed either by fires; by floods; you name it. And, you might want to fight about why, but it's happening. And, we need to do what we need to do to protect New Jersey's -- not just the environment, but the citizens, and the property.

There are thousands of people in Europe right now dying from heat stress. And, this is not the first year it's been happening; it's happened year after year. I'll make a bet with you we're going to have the hottest year in the history of the world again this year, in 2026. The world's climate and weather are dramatically changing. What do we need to do in New Jersey to reduce the impact on us -- and, also, to save us money?

As elected officials, we're trying our best in these very difficult and expensive times to reduce costs. So, when we say to you, "Would you consider going into debt to protect some of our infrastructure?" our basic argument is that you're going to save a hell of a lot of money. It's like the AAMCO Transmission -- you can pay me now, or you can pay me a lot more later. So, what do we need to do?

So, that's the basis. Our first witness is Lieutenant Sean Talty, Assistant Bureau Chief of the Recovery Bureau, the Office of Emergency Management.

Lieutenant, if you'd come forward, we'd appreciate your testimony on where we stand.

LIEUTENANT SEAN TALTY: Good morning, everyone.

My name is Sean Talty; as mentioned, I am Lieutenant of New Jersey State Police, and I am the Acting Assistant Chief of the Recovery Bureau within the State Office of Emergency Management. And, one of my

functions as the Recovery Bureau is facilitating funds from the Federal Emergency Management Agency in support of local and State mitigation efforts -- with the primary objective of life safety and property preservation.

Those grant programs include Public Assistance Grant Program; Building Resilient Infrastructure in Communities, or BRIC; Flood Mitigation Assistance, or MFA; High Hazard Potential Dam Grant, or HHPD; Hazard Mitigation Grant Program, HMGP; Safeguarding Tomorrow Through Ongoing Risk Management Act -- Storm Act, and the revolving loan fund associated with that act; and Pre-Disaster Mitigation, which is congressionally directed PDMC. And, also, the Next Generation Warning System.

I am honored and very happy to be speaking to you today with regard to investment in storm-resilient infrastructure within the State of New Jersey.

We're at a time where the need for resilient solutions is at its highest, and, through my experience, I know that our confidence in grant funding is at its lowest. If we're talking about storm resilience, we have to talk about flooding. When we look at New Jersey's nature-based hazard profile, flooding is clearly the most significant threat. Nearly 20% of New Jersey's land area is within the identified special flood hazard area, which is also known as the 100-year flood zone. And, the 100-year flood zone is a misnomer; it doesn't mean that it's going to flood every hundred years, that means that it is a 1% chance of flooding each and every year.

We have 597 State facilities which are within this area. We have more than 3,000 bridges and tunnels and 5,000 miles of roadway. In recent years, we have seen coastal flooding, storm surge, riverine flooding,

flash flooding, and urban flooding. We even see -- as Lavallette surely knows -- sunny day nuisance flooding in certain areas at all times of the year, causing significant disruptions. There is no portion of the state that is immune to the threat of flooding.

Published last year, the Infrastructure Needs Assessment for the New Jersey Development and Redevelopment Plan estimates that over the next 10 years and more, hundreds of billions of dollars will need to be invested across all sectors. That includes transportation, energy, agriculture, tourism, and more. The state's flooding risk must be considered when investing these funds. And, so, if we're talking about flooding, the questions become, "What do we do?" "How do we do it?" and, of course, "How much is it going to cost?" And, this is unfortunately where the conversation becomes a little more difficult.

There is no turnkey simple solution to solve flooding in New Jersey. That's not the case all over the country, if we look in areas where tornadoes are the greatest hazard. We can install tornado-safe rooms, and, while that doesn't eliminate the damage caused, they're very effective in saving lives. In Florida, strong hurricane winds and significant threat -- they cause roofs to lift off; we can install straps, hurricane straps, and they stabilize the structure and they protect property. Flooding, especially as we see flooding in New Jersey, does not have a simple solution and it cannot be solved by a single entity. It takes a whole government approach to tackle these problems. We need unique, novel, and specifically tailored to the local region solutions. And, that region is an important distinction to make, because flooding doesn't respect jurisdictional boundaries.

We heard the Mayor talk about the joint efforts that are being made with the coastal communities. These solutions have to be coordinated with the surrounding communities, towns; conform to the State and County requirements. I'd point to the Hoboken Rebuild by Design and ResilienCity Park, which involves Hoboken, Weehawken, and Jersey City; and, also, the Shark River Basin Resilience Region, which involves Monmouth County, Avon-by-the-Sea, Belmar, Neptune City, and Wall Township, as an example.

The truth is, the water is coming; the water needs somewhere to go. The best strategy we have as a State is to restrict building where we know water is going to be; protect infrastructure already in place by encouraging water to go around it; or move infrastructure out of the water's way.

The State strategy, on a whole, is to elevate or buy out property to relocate into a safer location. That approach has its limitations. Individualistic, tailored, novel, and innovative solutions implemented by the whole of government is necessary. Our primary method for identifying these solutions is our hazard-mitigation planning process. The hazard-mitigation planning cycle is a critical process; it identifies threats and the risk associated with those threats. It identifies strategies to mitigate those risks, which culminates, ultimately, in a project proposal. These projects then sit in the local hazard-mitigation plan until funding becomes available. The goal of the State hazard-mitigation plan is to break the costly cycle of disaster, damage, reconstruction. And, it sets long-term goals to protect life, property, and infrastructure. While funding for these hazard-mitigation plans is in jeopardy, that really is a downstream issue. Incentivizing

commitment to true hazard-mitigation process would be a strong first step in tackling that big question of how do we solve flooding in New Jersey?

I do, finally, would like to highlight a positive. I mentioned earlier the Storm Act, and I want to talk briefly about that program because we've seen great success with that in New Jersey. The safeguarding tomorrow through ongoing risk management -- excuse me, risk mitigation -- or Storm Act of 2020 established a storm-evolving loan fund. Thanks to legislation passed in 2023, New Jersey Office of Emergency Management partnered with the New Jersey Infrastructure Bank to create the New Jersey CHAMP -- or the New Jersey Community Hazard Assistance Mitigation Program -- which provides low-interest loans for eligible hazard-mitigation and resilience project. It's a revolving loan fund, and, so, as loans are paid back with interest, these funds can then be reinvested. It is a self-sustaining and self-perpetuating program, with the specific goal of relieving financial burden of mitigation investments into the State's infrastructure.

Further investment into State-run programs, similar to New Jersey CHAMP, is a proven opportunity to build resilience in a financially responsible manner. With proper hazard-mitigation planning and funding available to execute on these projects, New Jersey can begin to effectively invest in resilient infrastructure and meet the goals I spoke of early -- life safety and property preservation.

The New Jersey Office of Emergency Management stands ready to assist in any way we can.

And, again, thank you for the opportunity to speak here today.

SENATOR SMITH: We greatly-- We greatly appreciate your testimony and the work you've already done, because, should the package

go forward -- which will set aside a great deal of money, with the consent of the voters -- it's good to start with a list of projects that hopefully prioritize what we need to do.

So, thank you so much for your work.

LT. TALTY: Absolutely.

SENATOR SMITH: Chairman, would you like to--

ASSEMBLYMAN KENNEDY: Next?

SENATOR SMITH: Yes, please.

ASSEMBLYMAN KENNEDY: Sure.

Next we have Rich Henning; President and CEO of New Jersey Utilities Association.

RICHARD W. HENNING: Good morning.

I would like to thank the Joint Committees for inviting the New Jersey Utilities Association to participate in this important discussion today.

My name is Richard Henning; I am President and CEO of the New Jersey Utilities Association. We represent the New Jersey's investor-owned utilities. Up until about a month ago, there were 13; there's now 12 investor-owned utilities. We also represent the State's four investor-owned electric distribution utilities: Atlantic City Electric; JCP&L; PSE&G; and Rockland Electric.

From the electric utility perspective, perhaps the most important point we can make today is that resilience is no longer about preparing for one particular type of storm, or one particular season. It's really about building, maintaining, and operating systems that can withstand a wide range of challenges and evolving demands. New Jersey's

electric system must withstand multiple stresses occurring at the same time: prolonged, extreme heat; intense thunderstorms; high winds; flooding; and falling trees. The events of this summer really provided very clear example. In many areas of New Jersey this summer, it feels like hot air blowing from a furnace outside a heatwave after the heat has been blasting us with temperatures in the high 90s, or even triple digits. With-- And, that's without the humidity factored in. Temperatures that high are considered dangerously hot, especially when combined with high humidity. And, they can cause heat exhaustion or heat strokes -- as the Senator had mentioned earlier.

When we see temperatures that high, we see electric demand also approaching historic levels. And, on July 2 of this year, the PJM Interconnection -- which governs, for 13 states, all of our electric demands -- reported an instantaneous peak load of approximately 162,700 megawatts. That's important because they also activated approximately 6,000 megawatts of demand response, and they believe that the actual underlying demand likely exceeded an all-time high that was established in 2006. This is an important distinction for today. The amount of generation in a regional wholesale market, and the wholesale price of electricity, are largely outside the control of the electric distribution companies -- the companies I mentioned that we represent.

What our utilities are responsible for is making sure that once that electricity reaches their systems, the poles; the wires; the substations; transformer; and any other infrastructure needed to deliver it to customers, that they can perform under increasingly difficult conditions. And, this summer has demonstrated just how important that responsibility is and

why it's imperative that we continue to invest in this infrastructure.

Especially when you consider that 15 -- and, I think this belies the point you made before, Senator Smith -- 15 of the last 20 hottest years recorded in the State of New Jersey have been recorded since the year 2000. Fifteen.

Extreme weather is certainly the new normal. The July heatwave did not occur in isolation; it was followed almost immediately by severe thunderstorms, high winds, and flash flooding. And, we've seen that basically throughout July and August. Wind gusts reached approximately 70 miles an hour in parts of the state. *Huge* trees were toppled; power lines were brought down; and nearly 800,000 customers lost electricity in a peak event that occurred during July 2 through July 4. These are precisely the kinds of compound events that utilities must prepare for now. Extreme heat placing extraordinary demand on the electric system, followed by severe weather physically damaging that same infrastructure -- which is at its maximum.

The men and women of New Jersey's utilities mount an extraordinary restoration effort. Approximately 15,000 utility workers; contractors; mutual assistance personnel worked around the clock and across the state to put service back in during that July 4 holiday and afterwards. That does not count all the other emergency personnel -- and, certainly, I note at least two mayors on this group -- all the emergency personnel of your towns that were involved in getting that restored as well throughout the communities.

PSE&G restored more than 380,000 customers between July 1 and July 5, replacing and repairing approximately 700 utility poles and clearing more than 1,500 trees. JCP&L restored more than 400,000

customers with approximately 5,700 personnel involved in the response. They replaced more than 500 broken poles; 600 transformers; and 31 miles -- miles -- of wire. Atlantic City Electric restored approximately 26,000 customers in the first 24 hours while responding to issues caused by the extreme heat in portions of its local system. And, Rockland Electric restored more than 50,000 customers in both its New Jersey and New York territories, and assistance from more than 150 mutual aid crew members. These numbers demonstrate both sides of the resilience discussion: the extraordinary fiscal damage that severe weather can cause, and the outstanding capability of New Jersey's utilities to respond when those events do occur. But, restoration is only one part of the resilience question. Our members' long-term objective is to reduce the amount of damage that occurs in the first place, and to limit the number and duration of outages when damage is unavoidable.

There is not one category of infrastructure or one geographic area that represents all of New Jersey's resilience risk. The State has, particularly, a diverse electric system, and that vulnerability varies considerably by geography and by the type of hazard that might be involved. Coastal and low-lying areas face greater exposure to flooding, storm surge, saltwater intrusion. Heavily wooded areas in the northwest part of the state, and in suburban towns throughout the state, face greater exposure to trees and limbs falling onto electrical facilities during high winds and severe storms. Areas with significant overhead infrastructure can face greater exposure to wind, to falling vegetation, and also to debris.

For that reason, utilities need to be able to make resilience investments based on their individual risks and needs rather than a one-

size-fits-all approach. And, utilities in those areas are probably in the best position to evaluate their systems at the circuit, the substation, the facility level, and identify where extreme weather can intersect and infrastructure condition, vegetation, geography, and critical custom needs come into play. Utilities need to be able to prioritize these investments that address their greatest vulnerabilities, while providing multiple reliability benefits. Strengthening, replacing poles, and other overhead equipment where infrastructure is particularly exposed to wind and falling vegetation. Personally, I've seen that actually in my area where telephone poles have gone from roughly 55 feet all the way up to 80 feet high. No one in their right mind loves an 80-foot pole, but it does take the wires up and out of the tree range.

Hardening distribution substation equipment to help utilities better withstand extreme weather events and flooding, and allow greater voltage control during emergencies. So, it's not just the hardening, but it's also a new technology that's available as well. Replacing and upgrading aging equipment; installing new lines, transformers, and other equipment to help neighborhood electricity grids withstand extreme weather events. And, expanding system automation -- an important part of smart grid technologies that can help us identify faults; isolate damaged sections of the system; and restore affected customers more quickly. Continue and increase robust vegetation management, particularly in heavily wooded areas and suburbs along circuits that are located near customers' property, where falling trees present significant reliability risks. Strengthening infrastructure serving critical services, such as hospitals; emergency-response

facilities; water; wastewater systems; and ensuring that the services that people need critically most are available.

A stronger pole can improve resilience against thunderstorms, hurricanes, as well as falling vegetation. Vegetation management can reduce those ordinary storm outages while reducing wildfire ignition risk as well. System automation reduces the impact of virtually any event by isolating damaged infrastructure and rerouting electric where it needs to go. These types of investments provide customers value not just throughout the year, but also in preparing for storm hazards.

The utilities' focus on reliability and affordability requires substantial investment. And, NJUA recognizes that those investments ultimately have great implications for customers. It's imperative that we be able to identify the vulnerability; understand the risk; compare it to the available solutions that are out there on the marketplace; and then make the investment that produces the greatest reliability and safety for all customers. Utilities also need the regulatory frameworks that allow that prudent, forward-looking investments before infrastructure fails, rather than requiring the system to be built after we experience a catastrophic event, because the need for investment will be much more.

Failing to prepare is more expensive than preparing. There's an old adage that the road to perfection is always under construction, and that is such a truth, because perfection is *never*, never attained. But, we strive for it; it doesn't mean you don't stop trying to reach for 100%.

Wildfires-- We have to talk a little bit about wildfires. This year, with all the storms that we've seen, they may not present New Jersey with the same level of utility risk that's seen out in the western states of

Canada, but they are becoming a more important consideration as periods of extreme heat, and we've seen periods of low humidity, wind, dry vegetation, and they create conditions conducive to a fire. And, from our perspective, we're focused on preventing electric equipment from becoming a potential ignition source, as we've seen out in California, ensuring electric systems can withstand and recover from a wildfire regardless of how it starts.

Fortunately, many of the measures that utilities have already undertaken after significant storms have already reduced that wildfire risk. Prevention begins with fundamentals of operating a safe and reliable system, which means inspecting equipment; maintaining the rights of way; managing vegetation; and monitoring changing conditions. Vegetation management is particularly important, because it serves as both wildfire prevention and broader storm resilience. Utilities do regularly trim vegetation around electric facilities, and they increase patrols and inspections when conditions warrant. However, an important challenge is that utilities do not control every tree capable of affecting electric infrastructure. In my neighborhood -- I happen to live in Park Ridge, New Jersey; I was on Town Council for 10 years -- in our neighborhood, we have trees that are at upwards of 100 feet and more.

And, if you saw some of the coverage that occurred after one of the last storms, you probably saw some of the New York television stations standing in front of 100-foot trees in Paramus -- and, I can't say whether it was a cyclone or whatever that came through. It's very difficult to do vegetation control on someone else's property when you're almost going to their house and taking trees away from them. And, it's something that I

think that we probably need to consider for the future, how we do that vegetation management. But it's vital because the unmanaged trees, the ones that we can't get to that are on customer property, they can -- they are sources of significant outages. And, not just significant outages, but in significant timeframes that their outage are. When you've got a tree that could be 15 feet in diameter or more, 100 feet or more, and that starts toppling down some of the wires and some of the telephone poles, it's going to take a bit of time to not just fix that system, but also get rid of that tree. So, there's a whole lot of things that go into vegetation management that need to be looked.

In terms of future wildfire risk, as we consider wildfire risk part of a broader assessment of system risk, we'll consider the combination of dry vegetation, high winds, heat, and other conditions that might create a greater risk around the electric infrastructure. It also means that it becomes another factor that we consider when investing and prioritizing in vegetation management. Inspections, system hardening, and operational decisions.

In closing, I'd just like to say that the experience this summer really reinforces that severe weather is not an abstract future concern. I think the Senator said it best -- it's here; it's not coming, it's here already. We've seen it, 15 out of the hottest 20 summers on record tells you that New Jersey is part of everything else that's been going on in this country. Extreme heat can push the regional electric system toward record demand at the same time that we see these storms coming through. And, that is a nexus for great difficulty and a challenge for our systems.

We will be making sure that we learn from these particular storms; we learn from the outages that occurred during this timeframe over these past couple of months. We look at the portions that are most vulnerable to extreme weather; we prioritize what critical infrastructure, what investments need to be made in projects. We need to address all those multiple risks, and maintain the flexibility necessary to make investments before that infrastructure fails. Wildfire will be part of that planning, and it will be considered alongside flooding, heat, winds, vegetation, and all the other hazards that we see.

NJUA and all of our member companies look forward to working with the Legislature; with your committees; the administration; the BPU; the DEP; emergency management officials here, all throughout the state in continuing strengthening our electric infrastructure and keeping reliability, safety, and affordability at the center of those discussions.

SENATOR SMITH: So, we need you to take two messages back to your members. Number 1, they should-- This is not a situation where anybody should wait on. I know the utilities *are* working on it, but you should put your plan together. What is it that you think is your responsibility? What is it that you think may be our responsibility?

Which leads to the second message. If we use part of the money from the bond issue to finance improvements to the grid, who has to pay for it? If it's on our dime, it should not be rate-based. I mean, one of the points of this is affordability. We're not looking to raise the rates of our ratepayers, we're looking to actually cut their costs and have a more reliable electric system.

So, please have them start to think about that. What is your role? We will probably ultimately ask the utilities to participate in installing the improvements, but you shouldn't charge our ratepayers for what that costs. You might have a charge for installation, but not the capital costs, because, I think, ultimately, the citizens are going to say, "We want to do that and we don't want it added on," at 10% a year for forever.

OK, so if you take that back, we'd appreciate it.

SENATOR TIVER: Chairman, can I ask a question real quick?

SENATOR SMITH: A real quick one--

SENATOR TIVER: OK--

SENATOR SMITH: --we have a *huge* agenda--

SENATOR TIVER: Real quick.

So, we talked about redundancy; hardened facilities; protected substations; backup systems; all that kind of good stuff. Is there anything that we're doing-- Or, are there any projects out there where we're hampering the permitting process to get things moving? And, if so, what do you need from us to get this moving to make sure that our families are protected for the next major storm?

MR. HENNING: I would tell you that, from a utility perspective, and what we've seen over these past couple of months, we're always learning; we're constantly looking at ways to harden that infrastructure. We learned quite a bit from Sandy, but Sandy was a different storm; Sandy also affected the entire state. There was flooding damage; there was wind damage; there was damage all throughout the state.

We're seeing these in little isolated pocket storms. And, as we talked about before -- or I talked about before -- one of the great nemesis of

these electrical systems seem to be trees that are on private property, customer's property. Everyone loves a canopy of shade within their suburban district. The difficulty is when those trees get old and those trees get larger and larger, they tend to become risks for exactly what we're seeing, when a small storm could -- I can't say a small storm -- but if a small hurricane comes into a certain area -- hurricane is the wrong word; typhoon or whatever -- it affects a certain amount of a suburban community, and it can just drive a swath of trees to just kill off an entire utility pole section. And, then, you're talking about a timeframe to regenerate all of that. Can you harden against that? That's the question.

Some-- I've seen some instances where they're going to steel poles; some instances where they're going to different ways of being able to account for being able to harden that system. So, those are some of the things that we have to take a look at and, within the Senator's purview, ensure that it's going to be cost efficient as well for the customers. Because we've heard the affordability message.

SENATOR SMITH: Let me give you another answer: PJM. We have the most dysfunctional interstate organization in the United States of America. They blocked 79 projects that were proposed in New Jersey over the last three years, and they're now being called on the carpet by FERC, the Federal Energy Regulatory Commission. On July 23 -- and, we participated, New Jersey participated -- there is now a PJM legislative caucus and 40 legislators from the 13 states saying, "What the hell are you doing to us?" Because all the 13 states have received the 20% increase. There's now going to be \$63 billion of added cost to our ratepayers because of PJM's decision on rates.

You have to understand, our BPU does not set rates in New Jersey. They are subject to PJM's auction. There is a real effort to reform PJM -- as a matter of fact, FERC's decision from that July 23 hearing was that in the next 90 days, PJM has to go through mediation with the stakeholders to see if they can come up with a solution. So, we actually have an ISO that works. And, if not, FERC has said, "Then we'll make the decision if you guys can't come to a conclusion."

So, reform is on the way -- bigger picture. The fire is absolutely-- And, I think we might have some legislation that's going to help on that.

But, we do appreciate your comments and contribution today.

Let me call Dr. Clinton Andrews, Distinguished Professor, Associate Dean for Research, and Director of the Center for Urban Policy Research at the Edward Bloustein School of Public Policy, Rutgers University. And, he was kind enough to provide written testimony -- that's this stuff, right -- which I had a chance to look at last night. What we're going to do-- And, it's great. It has really fabulous information. We're either going to put a citation where you can get it, or we might even attach it to the transcript from today, it's *that* important.

Doc, would you take it away?

CLINTON J. ANDREWS, Ph.D.: Thank you, Senator.

And, don't worry, I'm not going to read aloud all 60 pages.
(laughter)

DR. ANDREWS: So, good morning.

I am Clint Andrews. As the Senator mentioned, I am a Professor at Rutgers. I direct our Center for Urban Policy Research, but

also, importantly, I am a faculty advisor to the Rutgers New Jersey Climate Change Resource Center. And, Marjorie Kaplan, Lucas Marxen, and Ashlyn Spector--

SENATOR SMITH: Will you please move the microphone a little closer to you? It's--

DR. ANDREWS: Sure, is that better?

SENATOR SMITH: Yes. So everybody can hear you.

DR. ANDREWS: So, the Climate Change Resource Center folks are the ones who drafted this helpful report.

What I would like to do for the next couple of minutes is pick a few highlights. And, I want to talk about the types of infrastructure that are most susceptible to storm and climate-related hazards, and where investments might be effective.

And, I want to acknowledge that, really, what we're trying to do is think about how to help communities adapt to stresses from a changing climate, while better positioning New Jersey for a good and strong future. And, I think I need to begin with a definition of infrastructure.

And, the dictionary is going to tell us that infrastructure consists of the physical and organizational systems that support the rest of the economy and society. And, so, it's an enabler of a well-functioning community. And, the familiar physical infrastructure systems include our road networks and our electric power grids, as we just heard, and water systems among many. But, equally important are the organizational systems that deliver healthcare and financial liquidity and education.

So, something you can detect here is that what counts as infrastructure changes over time. And, for example, 50 years ago, there was

no internet. And, today, our economy can't function without it. And, so, in that sense, when we look at what's gone on with legislation over the decades, we can expect a little bit of a mismatch. And, different laws vary slightly in their definitions of what counts as infrastructure. That said, many of them are vulnerable. And, a variety of threats, in fact, may disrupt these different infrastructure systems. Some are manmade, such as the cybersecurity attacks that are currently threatening U.S. water supply systems. Others are natural, such as the coastal storms and intense heatwaves that we've been experiencing. And, we want infrastructure systems to be efficient and effective in normal operation, as well as resilient in abnormal situations. And, they should be able to bounce back after adverse events, and help the economy and the rest of society adapt to disruptions and changes.

And, storm and climate-related hazards are notable disruptions that have long afflicted New Jersey, and they are getting worse. Rutgers scientists are among those who have documented adverse trends in coastal flooding; the dollar amounts of storm damage; rising sea levels; and more extreme weather events in terms of rainfall intensity, wind, and extreme heat. Coastal jurisdictions, of course, bear the brunt of the sea-level rise and the largest storms, whereas riverine jurisdictions more often flood -- suffer from the flooding that follows intense rainfall. And, cities are especially vulnerable to extreme heat conditions, because air conditioning is less prevalent in rental housing, and urban heat island effects intensify the experience of heatwaves.

And, so, let's think about how do these hazards affect infrastructure systems? And, my colleagues have prepared this assessment

that I've attached to the testimony, and which I encourage people to explore. But, a few key takeaways.

First, as has been mentioned, the 2025 State Infrastructure Needs Assessment identified transportation, energy, water supply, and wastewater disposal as the infrastructures that have the highest infrastructure funding needs for the next 5-15 years. We heard some of these numbers, but transportation is estimated to need about \$66 billion through 2030. The energy sector needs somewhere between \$91 and \$194 billion over the next decade. Water supply and wastewater treatment each need about \$12 billion over the next 20 years. And, these are investment values that do not consider climate change-related impacts. These are due to the normal wear and tear, the normal changes, that are taking place in our economy and society. And, so, an infrastructure fund targeting resilience should be viewed as augmenting these already identified needs.

Now, there is a clear case for investment in climate resilient infrastructure in New Jersey. I would put the emphasis on transportation, water resources, and flood management, and a set of community and education and cultural infrastructure sectors. However, these scarce public funds would be better used if investments are informed by basic planning considerations. For example, it is possible to reduce risk to investments in infrastructure by ensuring that a direct residence, residences, and buildings to lower-risk areas, and avoids investments in areas that are highly exposed to coastal flooding and sea-level rise. I appreciate there's an irony in me speaking that sentence in this room, in this location.

Climatic factors are already increasing physical deterioration rates and putting stress on our infrastructure. The infrastructural

maintenance and repair needs identified today may change as technological advances make some infrastructure types obsolete, and shift statewide priorities. Because environmental conditions are also evolving, it may be helpful to apply adaptive management principles toward plans for maintenance, repair, mitigation, and future investments in infrastructure. This implies investing incrementally in flexible and adaptable solutions as adequate information becomes available.

For example, we think about the stormwater systems that our municipalities have. We see very quickly that there has been inadequate maintenance of those for years, and that as, for example, rainfall gets more intense, we need to upsize these same systems that we thought we had built correctly the first time, and those -- recognizing those specific needs becomes a useful way to prioritize the expenditure of the public dollars. There are sound reasons to invest public funds for more risk-resilient infrastructure. It is a systemic risk reducer, whose benefits accrue to all sectors of society, and the public good argument is especially strong when the infrastructure element is critical, such as at a services hub, or a transportation corridor. Or, when the distribution of impacts is disparate and affects vulnerable members of society. Or, when the infrastructure helps steer private decision-makers towards lower-risk choices. Infrastructure is a powerful steering mechanism.

Infrastructure investments typically provide a solid public payoff, yielding returns that are a multiple of the public investments. And, so, investing in climate resilience can yield a triple dividend by avoiding losses; by inducing economic or development benefits; and by realizing additional social and environmental benefits that accrue independently of

how climate scenarios unfold. The returns are especially compelling for transportation assets, flood protection, and essential public services associated with electric grids, stormwater-, wastewater-, and drinking-water treatment facilities.

There are extant programs in New Jersey that we should build on. And, so, for community-based, climate-change resilience, we can think of things like resilient New Jersey; the State and County Hazard Mitigation Planning; the New Jersey Community Hazard Assistance Mitigation Program; and the Resilient Communities Program. For land preservation, we are all familiar with Green Acres, and Blue Acres, and farmland preservation, and the good work that they have done. For water, we have the New Jersey Water Bank; the New Jersey Clean Stormwater and Flood Reduction Fund. For transportation-- In addition to the sort of familiar Transportation Planning Authority's resilience improvement plans, such as North Jersey has done, we also have Completing Green Streets for All, the New Jersey Department of Transportation's framework for managing sediment in the back bays of New Jersey. And, New Jersey Transit's Sustainability Plan.

All of these provide an excellent foundation upon which to build further infrastructure investments; however, there's a need for a dedicated and sustained source of funding, which does not yet exist, for climate resilience planning and infrastructure in New Jersey. Initiatives are often funded through a patchwork of Federal and State resources, and are often centered on other goals, such as carbon sequestration, or water quality, or habitat restoration. Such efforts are not yet focused on maintaining a thriving business district, for example, or preventing damage

before an event such as a storm -- all of which are at the center of local concerns, and which impact affordability.

Federal funds -- as we all know -- are no longer as reliable as they once were, which places the onus on the State to figure this out. Good models for efficiently and effectively delivering financing for a more resilient infrastructure are out there. The New Jersey Transportation Bank provides precedent for a New Jersey Revolving Loan Infrastructure Financing Program that does not rely on Federal funds, and is supported through State bond legislation. Other states, such as New York and Rhode Island, have successfully implemented dedicated funding for resilient infrastructure initiatives. These initiatives are often preceded by planning efforts, with Massachusetts and Minnesota offering instructive examples.

Public infrastructure investments can be augmented and leveraged through partnerships with foundations and the private sector. And, certainly, a lot of what we heard from the Utilities Authority representative illustrates that. And, I think there is good debate to be had about, should things be rate-based or financed through other mechanisms?

So, in summary, there's strong evidence for the efficacy of strategies that adapt infrastructure to contend better with climate change while directing development away from floodplains and reducing the difficulties experienced by vulnerable sub-groups. Appropriate planning-informed models for financing these improvements exist, and New Jersey would benefit from their adoption today.

To the Committee members and the Chairs, I want to thank you for the chance to talk with you today about this timely and important issue.

Thank you.

SENATOR SMITH: Thank you so much for your information.

And, we're going to find a way either to include the research either by reference so they can access it over the internet, or actually put it in the transcript.

Thank you so much today.

Chairman.

ASSEMBLYMAN KENNEDY: No questions?

SENATOR SMITH: Nope.

And, maybe the next two.

ASSEMBLYMAN KENNEDY: OK, the next two people are Dr. Johnny Quispe and Tommy Polzin, Director of the Nature Conservatory -- and, both from the Nature Conservatory.

SENATOR SMITH: And, I think with them is Phil Eschevarria, who is--

PHIL ESCHEVARRIA: Beautifully done.

SENATOR SMITH: OK, who may be their boss.

Go ahead.

MR. ESCHEVARRIA: I know I'm not on the list, but I'm sneaking in real quick.

Chairman Smith, Chairman Kennedy, and members of this Committee, on behalf of the Nature Conservancy, I want to thank you for taking the time to hold this hearing and allowing us to testify.

My name is Phil Eschevarria, and I'm the Director of Government Relations for the Nature Conservancy. And, for those who are

unfamiliar with the Nature Conservancy, we are a global conservation leader dedicated to protecting the lands and water on which all life depends.

And, while we may be known for our conservation work globally, the use of nature-based solutions to protect our infrastructure and natural resources is a cornerstone of the work that we do across the world. From our cities to our coast, the Nature Conservancy deploys green infrastructure to work alongside traditional infrastructure to protect communities; to protect wildlife; and to protect our residents of the state.

And, listen, I'll be the first to admit that nature-based solutions is not the silver bullet for all of our resiliency needs, but it is an under-utilized tool in our tool kit -- one that can help prolong our current infrastructure needs or reinforce new ones that we build.

I'll turn it over to my colleagues shortly, but, before I do, I want to leave you with this: Water does not wait. It does not wait for laws; it does not wait for infrastructure to be built; and it certainly does not wait to enter homes and destroy communities, residents' livelihood, and businesses as well. Without bold action, without bold funding, and without a bold vision, New Jersey will continue to be in a cycle of reacting instead of being prepared.

So, with that, I'll turn it over to Dr. Quispe to discuss our work that we do in nature-based solutions in Paterson and Newark.

JOHNNY QUISPE, Ph.D.: Thank you, Phil.

Chairman Smith, Chairman Kennedy, and members of the Committee, my name is Dr. Johnny Quispe; I am the Director of Cities Programs with the Nature Conservancy. I received my Doctorate in

Ecology at Rutgers, as did I my bachelors. So, I've spent a lot of time in this state.

Throughout my career, my work has centered around creating a world where people and nature thrive, spanning across government, nonprofit, and private sectors.

New Jersey's cities are facing challenges; they are becoming harder and harder to manage. More frequent and intense rainfall, as you heard today, are overwhelming our aging stormwater systems and combined sewer overflows continue to threaten water quality and public health across many communities. At the same time, extreme heat is increasing health risks -- particularly in neighborhoods that have fewest resources and limited access to cooling, shade, and other protective infrastructure. They are no longer future concerns -- they are affecting communities today.

This past July, 29 New Jerseyans lost their lives due to extreme heat events, while flooding has caused loss of life; damage to homes and businesses; and disrupted communities across the state. Residents, businesses, and taxpayers are already bearing the cost of these impacts. As we consider how to respond, nature-based solutions are one of the most effective and cost-efficient tools available. Investments in urban trees, rain gardens, green streets and other forms of green infrastructure can help communities address flooding; reduce urban heat; improve water quality; strengthen public health; and create economic opportunities while making neighborhoods more resilient.

The economic case for these solutions is compelling. Nature-based projects create local jobs while supporting a range of professions. From planning and design, to construction and long-term maintenance,

these are all local place-based jobs. Evidence from a study with DC Water has shown that integrated green-gray infrastructure approaches have generated 25-36% greater local employment impacts than gray infrastructure alone -- because more of the work is focused on local labor, contractors, and ongoing maintenance. Traditional infrastructure remains essential, but we cannot rely solely on increasingly expensive gray infrastructure to manage growing volumes of water.

As storms become more intense and development continues, that approach becomes more difficult and costly to sustain. Nature-based solutions help address these challenges before they become infrastructure problems by capturing, absorbing, and slowing stormwater work falls; these approaches can reduce the volume of water entering already stressed systems. Helping communities address flooding and combined sewer overflows is critical.

In Paterson, we are planting -- planning and planting -- stormwater planters to help advance the creation of a green street. Upon full completion of this project, we will be capturing over 250,000 gallons of stormwater annually from this one project alone. What makes these investments particularly valuable is that they solve multiple challenges from one single investment. Few infrastructure investments provide that breadth of benefits from a single project.

Urban trees reduce urban -- reduce dangerous heat, lower energy costs, improve public health, and strengthen neighborhood resilience. Our recent research in Newark has shown that neighborhoods with greater tree canopy are 6 to 10 degrees cooler than nearby areas with limited shade, illustrating the importance of urban trees in reducing heat.

During extreme heat events, that difference can have meaningful implications of health and -- for health and community safety.

The question is not whether nature-based solutions work; the question is whether we will invest in them in the scale necessary to meet the challenges facing our community statewide. The benefits are clear; the need is urgent; the time to prioritize and fund nature-based solutions alongside traditional infrastructure to protect New Jerseyans for generations to come is now.

Thank you.

TOMMY POLZIN: Thank you, Dr. Quispe.

Thank you, Chairman Smith, Chairman Kennedy, and members of the Committee.

My name is Tommy Polzin, and I am the Director of Coastal Programs for the Nature Conservancy, where I oversee our coastal resilience work. Over the last 20 years, I have worked in the private sector, government, and nonprofit sector on projects that use nature-based solutions to solve practical problems. I've worked on projects that reduce erosion; redirected floodwaters; and even treated industrial wastewater. I have seen these approaches save money; reduce risk; and improve the performance of our infrastructure systems.

One lesson that has been consistent throughout my career is that some of our most effective infrastructure doesn't always look like infrastructure. In New Jersey, one of the best examples of this is our salt marshes. Our coastline is home to more than 200,000 acres of salt marsh -- one of our most valuable infrastructure assets that we have. These marshes help protect a coastal region where more than seven million residents live --

like in this beautiful city here -- where coastal counties generate more than \$400 billion in annual economic activity. They are critical infrastructure that support commercial and recreational fisheries; absorb wave energy; reduce flooding; store carbon; and help protect communities from waves, storms, and sea-level rise.

The economic value of that protection is measurable. In a 2017 study, Lloyd's of London found that during Superstorm Sandy, New Jersey's coastal wetlands prevented approximately \$430 million in property damages. Areas behind existing marshes experience roughly 20% fewer property damages in similar areas where marshes have been lost. These avoided damages represent real savings for homeowners, businesses, local governments, and taxpayers. But, unfortunately, these marshes are under increasing pressure. Rising seas, stronger storms, and erosion are causing many marshes to lose elevation, and, in some locations, slowly drown. NJ DEP's current mapping indicates that 61% may be vulnerable if marshes cannot keep pace with rising seas. As that happens, New Jersey loses a form of protection over the expensive and time consuming -- to replace; excuse me.

That is why the Nature Conservancy has been investing in marsh restoration projects throughout southern New Jersey. Working with State, Federal, academic, and local partners, we are using clean sediment dredged from navigation channels to help rebuild struggling marshes and raise their elevation. Material that might otherwise be managed as a disposal problem can instead be used to strengthen our natural infrastructure. Between 2014 and 2016, Nature Conservancy and our partners restored more than 60 acres of degraded marsh habitat in Avalon,

Ring Island, and Fortescue using this approach. Marsh vegetation recovered across all three sites, demonstrating that these projects can successfully restore marsh function and resilience.

One lesson from these projects is that natural infrastructure requires maintenance and investment just as our engineered infrastructure does. When traditional infrastructure, such as roads, bridges, stormwater systems, or seawalls begin to deteriorate, we invest in repairs because we understand the cost of failure. Marshes and other nature-based solutions deserve the same attention. Maintaining existing protection is often far less expensive than replacing it after it has been lost. As New Jersey continues investing in resilience, marsh-restoration efforts offers an important opportunity to reduce future damages; extend the effectiveness of other infrastructure investments; and get greater value from work that is already being done, such as our navigation dredging.

The challenge moving forward, though, is scaling these efforts at the pace necessary to keep up with the changing conditions. That will require continued investment, streamlined permitting, strong partnerships, and a commitment to managing natural infrastructure as deliberately as we manage our engineered infrastructure. New Jersey's marshes help protect millions of residents; support hundreds of billions of dollars in economic activity; and have already prevented hundreds of millions of dollars in storm damages. Protecting and maintaining these assets is a practical, cost-effective investment in our state's future.

The seas are rising, and the marshes are shrinking. Every year that vulnerable marshes continue to lose ground is the year that New Jersey loses critical infrastructure. If we are serious about affordability, protecting

taxpayers; reducing long-term costs; and building resilience for future generations, we must invest in natural infrastructure alongside our traditional infrastructure.

Thank you very much for the opportunity to testify.

SENATOR SMITH: And, let me thank the Nature Conservancy for your information today, it's very, very helpful. And, it will be helpful to the front office, the Assembly, the Senate, in making this decision.

But, you make the great point that the natural world has a lot of protections for it, so we'll just use them.

So, thank you so much.

Our next witness is Amy Chester, Director of Rebuild by Design.

And, Amy, you've got to tell me if you had a great -- you sent in a PowerPoint, I don't know--

AMY CHESTER: We're all set--

SENATOR SMITH: --if we can do anything with it.

MS. CHESTER: No, we're all set.

SENATOR SMITH: Oh, back here.

So, everybody has got to get a little bit of a neck twist to take a look at the--

MS. CHESTER: I always think it's better to see what we're talking about.

SENATOR SMITH: Take it away.

MS. CHESTER: So, thank you, Chairpeople, and members of the Committee. It is an honor to be here and always an honor to come--

SENATOR SMITH: You want to move those red mics closer to your--

MS. CHESTER: This one?

SENATOR SMITH: Yes.

There you go.

MS. CHESTER: Always an honor to come to New Jersey.

Rebuild by Design is located at New York University, and we've been working in Jersey for 13 years, since Hurricane Sandy, as of course Mayor (indiscernible) knows firsthand.

I am here to talk to you about New Jersey's infrastructure. Climate change presents economic risks to New Jersey threatening infrastructure, housing, tourism, and agriculture. Flood exposure to multiple public assets drives long-term costs through damages, service disruption, insurance, and capital replacement -- ultimately increasing taxpayer burden as communities repair or relocate to critical infrastructure.

At the same time, there is a multi-billion-dollar deficit in the State of New Jersey. And, what we see in New Jersey is both rising cost for families and rising cost for government that is exasperated by the climate crisis; energy costs; home insurance; car insurance -- everything is going up and up at the same time that we are seeing more and more -- or, experiencing more and more devastating moments that our communities have to live through and build back from.

We cannot afford to wait any longer. As some of you have already seen, we have done a bunch of work really understanding the climate impacts across the United States, and what we found for New Jersey is that there have been 14 Federal disaster -- major disasters -- due to

extreme weather. And, I just want to add that we should also remember that a majority of things that our communities are experiencing never get a disaster declaration, like many of the storms this summer. There's almost \$8 billion in Federal close disaster assistance from FEMA and HUD, and New Jersey is ranked fifth in the U.S. for highest per capita support -- and, that's all of our tax dollars that is going to support.

Every county in New Jersey has had five or more disasters, and 50% have had at least seven, with Morris County being the highest. And, my goal today is to show you some of the data that we have. We'll never be able to tell you everything, but I just want to show you the tools that we've created, so you can understand the extreme risk that New Jersey communities are in.

Recently, we analyzed all 21 counties and all cities in New Jersey, and looked at the 3.5 million parcels. And, we included more than 15 data sources in the maps that I'm about to show you, and used the Rutgers New Jersey flood-risk elevation data as their underlying map. And, I want to make sure that you understand that this is also a conservative approach, because we know that 20-50% of flood damage and insurance claims happen outside of flood risk claims.

And, what we found is that one in four of New Jersey's critical public assets are at risk for flooding today. That's one in four. And, that goes to one in three by 2050. And, this puts over \$400 billion of property value and almost \$6 billion of annual tax revenue at risk. By 2050, thousands of parks and schools and libraries are going to face flood risk. I also want to add that 2050 is so short -- it's less than 25 years from now. And, as examples, nearly 400 assets in Jersey City and 98% of Atlantic City

are projected to flood. Displacement is already underway through New Jersey's Blue Acres program, that has already acquired 1,600 properties. And, we really think of that as the first wave of displacement.

The future is now. We know that NFIP has already paid out over \$6 billion, and just between 2019 and 2025, 230,000 homeowners have made claims through NFIP.

So, we recently put out two maps. I just want to quickly show you what we have. This is a map that looks across New Jersey, and what you're looking on the left-hand side for the red and orange are the high flood risk areas, and the darkest red is the lower-income areas; the orange is the higher-income areas. And, what you can see is that there's flood risk throughout New Jersey. It doesn't matter where you live, we are all experiencing this.

And, what we did for every single county is we quantified the number of parcels that are at risk. The market value and tax revenue that is at risk both for now and in the future, 2050 -- the displacement risk and where it's likely that the people who are most -- that are most in critical areas that are predicted to flood would likely move to, and that's that next orange area, before the yellow; how many Blue Acres buyouts there have been. And, then, we look at all critical infrastructure -- parks; superfunds; contaminated sites; libraries; powerplants -- and are able to show how many for that county are at-risk today, and how many are at-risk in 2050.

And, then, we've also mapped the Green Acres sites -- sorry, the Blue Acres sites, which are all over New Jersey. And, you can actually zoom in for the first time and see, by parcel, level data of who has already been bought out. And, we've created, like-- We've created county-by-county fact

sheets, so you can just put it in, and it will come out with a lot of information about your county, and a lot that comes from earlier reports that we have done. And, then, recently, we put out similar information for the 560 municipalities for New Jersey. Every single municipality we have now mapped the current flood risk and the future flood risk to see what critical infrastructure is at risk. On the left-hand side, you can see that there are different public assets. If you look at any one of them, you can actually isolate them. So, if you just want to isolate contaminated sites, for instance -- libraries, schools -- you can do that, and you can download the data.

Here's another example; I think this is parks for Jersey City. And, we also have published the findings across New Jersey for the different types of infrastructure by the number and percentage that are at risk. So, that's wastewater treatments; parks; Superfunds. So, you can look at it as you want to for the county, for the municipality, or you can look at it across New Jersey, what is at risk. And, what we have found is really alarming: There are 24 municipalities already that have 100% of their infrastructure at risk, and that's what you see in front of you there. And, then, 35 municipalities will have 100% of their infrastructure at risk in 2050.

And, we know that we're going to pay one way or another. The American Society of Civil Engineers has given New Jersey infrastructure a D-plus grade on their annual report card. And, we have seen a ton of studies that show that every dollar not invested in disaster resilience today can cost communities up to \$30 in future economic activity, and every dollar invested saves \$13, and that doesn't even count on-- That doesn't

even count our lives and livelihoods, as we have seen multiple deaths in New Jersey from these events.

So, what we are asking for, and have been advocating for, is a resilience infrastructure fund that could help reduce flood risk; invest in our water infrastructure and our climate resilience. And, we know that this is incredibly popular. We did a poll last year with Environmental Defense Fund from Fairleigh Dickinson University, and found that 60 -- sorry, 76% of New Jersey voters would support a public bond. And, that's before any type of campaign, because New Jersey voters are understanding it because they are experiencing it. And, we also know that it has the ability to create tens of thousands of jobs.

So, thank you; happy to take any of your questions.

SENATOR SMITH: So, let me say thank you on behalf of everybody here.

The-- A lot of things jump off the page, but the one thing that jumps off the page right through the center of the forehead is the multipliers that when we invest in mitigation, resilience, we get at least a 13 times--

MS. CHESTER: Yes, so, it's \$13 -- I'll put it back so you can remember it -- it's a dollar not invested in disaster resilience today can cost communities up to \$33 in losses, but one dollar also gives it a \$13 payback. That is the U.S. Chamber of Commerce statistics, and that's a pretty conservative organization--

SENATOR SMITH: Yes--

MS. CHESTER: --that did this very interesting report on the economic losses.

SENATOR SMITH: Devastating.

Thank you so much for coming in and giving us information.
Senator McKeon.

SENATOR McKEON: Thank you.

And, thank you, Senator Smith, as always.

Very briefly. I'm assuming the polling that you showed where New Jersey voters would support the bond referendums did not take into account if the Legislature didn't move on legislation, to have the polluters or the fossil fuel companies contribute.

MS. CHESTER: So, I just want to say that we are 100% in favor of that bill, and we think that both of them have to happen at the same time. With the Federal Superfunds we have seen, it takes a couple of years before you can actually draw down on those funds. And, the \$5 billion fund that we're asking for can be used right away.

For instance, New York passed a \$4.2 billion fund in 2022, and has already allocated over \$2.46 billion to communities around the state. So, it is a way of getting money out there immediately.

SENATOR McKEON: Thank you.

SENATOR SMITH: And, by the way, Senator McKeon, if you don't mind, I'm going to ask you to, at the end of the hearing, to put in context how these two pieces of legislation fit together -- other than the fact that you're the prime sponsor and I'm the co-prime on Polluter Pays.
(laughter)

And I'm the prime and you're the co-prime on the bond issue.
And, I'm assuming Assemblyman Chair Kennedy will be the prime sponsor

on the Assembly side -- hopefully -- if you're convinced this is the right thing to do.

And, I think we can be very inclusive. Members of the Legislature and the Senate, I mean, you're getting information about how critical this is. I'm hoping that we can offer this to you guys and gals as co-sponsors. Because, I think it would be a wonderful thing if the two Committees with jurisdiction over environmental issues had a bipartisan approach to this. So, if that's in your future, when we get the bill all finished -- we have it introduced by title -- but, we wanted to wait until this hearing to see where we should be putting our priorities.

So, we're going to put it all together, and we're going to send it around to everybody to see if it's something you want to participate in.

So, that being said, Amy, thank you for coming forward.

MS. CHESTER: Thank you.

I just also want to add that New York has a Superfund bill, and has passed an environmental bond act--

SENATOR SMITH: Right--

MS. CHESTER: --and is using both.

SENATOR SMITH: Sounds great.

Thank you for coming in.

Chairman Kennedy.

ASSEMBLYMAN KENNEDY: OK, next we have Peggy Gallos, Brian Brach, and Brian Valentino.

SENATOR SMITH: And, this is water and wastewater, right, guys?

PEGGY GALLOS: And, solid waste.

SENATOR SMITH: And, please indicate your affiliations.

MS. GALLOS: Good morning, everyone.

I am Peggy Gallos; I am the Executive Director of the Association of Environmental Authorities. We are local, regional, County, and State agencies -- mainly authorities -- that provide water, wastewater, and solid waste to millions across the state. Our members are managed, led, and funded by democratically-elected governments.

I am going to turn over most of the testimony today to Brian Brach, who is our President. And, he is the Director of the Manasquan River Regional Sewerage Authority. In that capacity, he actually runs three systems -- the Authorities Collection System; the state-of-the-art wastewater plant in Plumsted; and, the Holmdel Collection System.

And, Brian Valentino is also going to be testifying. He is the CEO of the Western Monmouth Utilities Authority. He is also the Founding Director of our wildly successful Environmental Professional Development Academy. And, he is the Chair of the Township of Ocean Sewerage Authority.

We also have Keith Marcoon, who is the Executive Director of the Ocean County Utilities Authority.

So, I am going to turn things over to Brian.

B R I A N B R A C H: Thanks, Peg.

So, my name is Brian Brach, President of the AEA.

I wanted to thank everybody for your time this afternoon.

I would like to start off by saying that I love leading this organization. We represent public water, wastewater, solid waste agencies that are stewards of the environment; stewards of public health and safety.

We employ the boots on the ground that actually enact all the laws and regulations that come down to us. And, I'd like to think that we're a significant reason why you have bluefin tuna 300 feet off the shore in Lavallette. Agencies have done amazing work over the last 50 years; we've also been very impacted by what's going on in the environment. Big storms, small storms.

But, if I could take everybody back to October 29, 2012, Hurricane Sandy. The Bayshore Regional Sewerage Authority, located in Union Beach, northern Monmouth County. The treatment facility sits on a spit of land that protrudes into the Raritan Bay. As we typically do during these storms, we're staffed 24/7, 365. There was a crew that was left behind to maintain the facility. About 6 p.m., the surge came in, and they were relegated to (indiscernible) up in a maintenance garage on a platform 10 feet high. So, as the water started coming in, they were worried; they didn't know what they were going to do. They thought that they were going to have to break through the window, go on the roof of the building, in order to escape the floodwaters. Thank God they were safe; the surge only got 4-6 feet. Unfortunately, the plant was not. It was significantly impacted.

And, I tell you that story because we sit here 14 years later, and they're still recovering -- 14 years, and I should say, \$71 million later. Big numbers. They've done a fantastic job hardening the facility with flood laws; relocating critical components above the flood level; and they're working on -- seems like electricity is a common theme here -- a redundant power supply. Because we-- All of our agencies have to operate 24/7, 365, regardless of the conditions. And, they're doing this to the benefit of the

ratepayers so it doesn't happen again. They serve about eight towns and 90,000 people. So, very important work.

If you go to the other side of the state, one of our other members is the Lambertville Municipal Utilities Authority. They sit-- Their treatment plant sits on the Delaware River, and one particular event that didn't necessarily come from the Delaware was Hurricane Ida. It was all the tributary streams to the Delaware that flooded the town. There's still apartment complexes that are uninhabitable. Lambertville MUA had a pump station that got inundated. They have since borrowed \$2.5 million from the water bank to elevate the facility to avoid future damages. You've got to spend money to save money; I think that's also a common theme with the infrastructure.

But, even before Sandy and Ida, all of our members have been hardening their facilities. A good example is the Brick Township MUA. They have a reservoir that's used for recreation, but it's really a potable drinking supply. It's gravity fed. The reason they did that is, during Hurricane Sandy, there was mass power outages; infrastructure damages. They kept water flowing the entire time. It's a good example of what you can do if you invest money smartly.

The South Monmouth Regional Sewerage Authority. Their treatment plant is in Wall Township. They serve a number of communities around them, particularly at the shore. They have an innovative pump station design where critical components are in an aesthetically pleasing trailer on wheels. You wheel it out before the storm; you wheel it back in after the storm. Really good investment, and that was one of their only pump stations that was not damaged during Sandy.

Resilience at our utilities is more than just infrastructure -- it's strategic planning; financial; succession planning; modernization. For the purpose for today, we're going to focus on -- myself and Brian Valentino -- on some of the enormous capital costs that go into hardening our facilities. Some other examples: The Passaic Valley Sewerage Commission. They have the largest wastewater treatment facility in the State of New Jersey, the fifth largest in the entire United States. They sit right at the mouth of the Newark Bay. You're not moving that facility. They were significantly impacted during Hurricane Sandy, and, since then, they have embarked on a \$692 million -- OK, we're talking almost a billion dollars -- program to harden their facility from future storms: Elevating equipment; building a floodwall around the entire facility; stormwater infrastructure to pump the water out that comes into the floodwall. And, also, the last step in their process is power generation; they buy power so they can get off the grid when need be.

The Ocean County Utilities Authority. We're sitting in a building served by the OCUA. Keith Maroon, Executive Director, is in the back. They've invested more than \$7 million since Sandy, hardening their 23 pump stations all up and down the Jersey Shore.

So, in Sandy, I'm talking a lot about wastewater treatment plants, pump stations -- you know the old expression, "put (indiscernible) downhill?" Unfortunately -- fortunately or unfortunately -- we're at the low points. A lot of these facilities, you're not moving, and a lot of these facilities, our utilities are taking proactive steps into hardening them. In particular, the Franklin Township Sewerage Authority is relocating a pump

station away from the Delaware and Raritan Canal floods -- I don't want to say infrequently; more frequently than we'd like it to.

Again, the South Monmouth Regional Sewerage Authority took that innovative pump station design; they're now rolling it out, literally and figuratively speaking, to a couple more pump stations. The Ewing-Lawrence Sewerage Authority -- they are also moving pump stations away from the Delaware River in order to get them out of the 500-year floodplain. Again, we're spending money; but, we're doing it for a very targeted, proactive reason. OECUA -- they have plans to spend \$33 million more hardening facilities, installing floodwalls. (indiscernible) out there, Northern Treatment Plant in Brick. So, lots of money.

Bergen County Utilities Authority -- they have an \$80 million plan to harden electrical infrastructure; protect the treatment plant; and, also, the five surrounding participant towns, they have projects in those individual towns so that we can stop it from happening there as well. North Hudson Sewerage Authority in the city of Hoboken -- I heard about Hoboken; they are working on separating the stormwater from the sewer so that we don't have CSOs -- combined sewer overflows. The Rahway Valley Sewerage Authority -- just another example of the treatment plant that's on the Rahway River. And, they're working to elevate equipment and get standby generator power to prevent any significant disruptions in the future.

And, last but not least, before I turn it over to Brian, the Manasquan River Regional Sewerage Authority -- my day job. We have a pump station that sits on the Manasquan River, right before it goes into Allaire State Park. During Hurricane Irene in 2011, we had water lapping

up to the front of the pump station; we're working on a floodwall. Now, we're doing it to protect our facility. I bring it up here because it has the residual effect of the New Jersey Water Supply Authority is 5 river miles downstream. They are the freshwater intake right off the Manasquan River for a bunch of shore towns, as well as the Manasquan Reservoir, which feeds Lakewood and Howell. So, by improving our facility, we get this residual effect downstream of preventing something catastrophic in the future.

So, food for thought, as I turn it over to Brian Valentino.

BRIAN J. VALENTINO: Thank you, Mr. President.

Thank you, Chairs, and members of the Committee. It's always an honor to help our legislators make good laws and improve the State of New Jersey.

Again, I'm Brian Valentino, the CEO of the Western Monmouth Utilities Authority. I also, in my private capacity, serve as Chairman of the Township of Ocean Sewerage Authority in Monmouth County, as well as serving as the Vice President of our State Association of Environmental Authorities.

I have the privilege -- if you can call it that -- of having served as a municipal administrator for the first 20 years of my career, including during Hurricane Sandy, in Hazlet, on the Raritan Bay, right adjacent to Union Beach. I don't have to tell any of you the damage that we took up there, and the recovery that took. But, today I am here to talk to you -- having that experience and that background -- about how it's impacted our water and wastewater utilities in the government sector.

You heard from President Brach -- we were already in from our colleagues prior to how much we've already invested in resilience. And, you've also heard that there's so much more that needs to be done. And, we're doing it. There is so much that we need to always do, because by necessity -- as President Brach said -- our facilities need to be near water, either for the intake, for drinking water, or for the discharge of the treated effluent that returns back to the environment clean. By definition, that makes our infrastructure highly susceptible and highly vulnerable to floodwaters; storm surge; sea-level rise; and extreme rainfall events. One third to one half of New Jersey's wastewater infrastructure treatment plants are in FEMA flood zones. One out of every two. Suffice it to say, this is not a theoretical risk; the risk is now. The infrastructure is already in harm's way.

So much of what we wanted to talk about today you've already heard from our colleagues across the sector, so I'll skip ahead and just tell you that we are asking you to remember three things: One, we want you to protect and strengthen the New Jersey water bank that goes beyond the scope of today's conversation. We want you to provide substantial funding separately, and specifically for resilience and hardening of our water, wastewater, and storm water infrastructure, as you're proposing to do -- or, considering doing, excuse me. And, we want you to prioritize investments based on vulnerability, the consequence of failure, the need for affordability -- all before those facilities fail.

We can't put the entire cost of climate and storm resilience on local ratepayers. It's impossible. This is a threat and a risk to the entire state, and, in a broader sense, it's a threat to the entire country across 50

states. If New Jersey wants to avoid repeating the experience of Sandy, Ida, or rainstorms like we've had within the last 30 to 45 days, we have to provide sustained State and Federal investment. That's not optional; it's essential to the infrastructure policy of our state.

I could talk to you about additional vulnerabilities you've already heard about. I could talk to you about specific examples you've already heard about. What I want you to take away from this is that the problem is statewide; the funding is a big part of the solution. Willpower on the part of your public sector utilities is also part of the solution. But, I think it's important to understand that when these systems fail, the consequence is more than an inconvenience. It's a loss of drinking water service; it's a loss of clean water in our surface water sources. And, we do not ever want to have a situation where we have raw sewage flowing through our streets and waterways -- even in the immediate response to the storm, when we have our first responders out there wading through those waters trying to help the public. The immediate threat to them is a wide variety -- it's electricity from electrocution; it's damaged infrastructure underground that they're tripping over in the streets; curbs that they're tripping over. But, they don't need wastewater and raw sewage there as well. So, these consequences run across a wide variety of our sector in the immediate and long-term response.

The choice is not whether we want to pay for resilient infrastructure; that's a no-brainer. The choice is whether we pay deliberately before the storm, or pay much more after something fails.

In closing, I thank you all for your taking your time to listen to your public water, wastewater, and solid waste utility experts in the government sector with you.

And, my colleagues and I would be happy to answer any questions you have.

SENATOR SMITH: So, not a question to you guys, and (indiscernible) answer today, but both for this panel and for the rest of the people who have testified-- In New York, one of the reasons that the bond issue was so successful was because they actually included, to the extent possible at the time, the projects that were going to be funded.

In other words -- and, I love New Jersey citizens, and they're the smartest citizens around -- but I don't think they're thrilled by us putting a pot of money together and not being really specific on how it's going to be spent. We don't want them to have the impression that this is "a slush fund," you know, it's for the politicians' favorite projects. It's for the projects that they need to have their life and their property protected in New Jersey.

So, for every group that's in here testifying, and anybody who reads the transcript or who is interested in this issue, we need your cards and letters. We need input from you about what are the best projects -- what are the projects that are going to get us the biggest bang for our buck, in terms of protecting our future? And, if you can put numbers on them, that would be helpful. But, send them in and we're going to -- I *think* we're going to try the best we can to include as many of the projects that we see as should be funded at the top of the list, whatever, in the bill, so that

everybody knows what they're voting for. No surprises; no slush funds. Let's get the job done.

So, on that happy note, we appreciate if you'll do follow-up letters and communications.

Peggy.

MS. GALLOS: Senator, I just want to add that the hard copy we provided to the Committee has a lot of -- a list of a lot of projects that we'd be very happy that you could put into the funding request.

SENATOR SMITH: Well, let me get you in some trouble.

MS. GALLOS: (laughter)

SENATOR SMITH: Is there any chance you could revise the list in the order of priority? Which is going to make some of your members mad, but you want to get the best bang for the buck--

MS. GALLOS: You can't please all of the people all of the time.

SENATOR SMITH: That's great.

MS. GALLOS: Thank you; thank you so much.

SENATOR SMITH: Thank you so much for coming in.

Let me ask Chamber of Commerce, Mike Egenton, to come forward.

Mike, is this a good deal for the State of New Jersey-- Where are you, Mike?

Is Mike here?

UNIDENTIFIED SPEAKER: He was here.

SENATOR SMITH: He was here.

UNIDENTIFIED SPEAKER: He's here; he's in the bathroom.

UNIDENTIFIED SPEAKER: He went to The Crab's Claw.

SENATOR SMITH: He went to The Crab's Claw.

UNIDENTIFIED SPEAKER: He went to the party already.

SENATOR SMITH: All right.

MICHAEL EGENTON: It's still morning; good morning, Chairman Smith and Kennedy, members of the Committee.

I am Mike Egenton; I am the Executive Vice President with the New Jersey State--

SENATOR SMITH: Louder, louder, louder. Put the microphone next to you.

MR. EGENTON: Mike Egenton, Executive Vice President--

SENATOR SMITH: No, no, no, no. Nobody can hear you.

MR. EGENTON: Like Verizon says, "Can you hear me now?"

SENATOR SMITH: Yes.

MR. EGENTON: All right, good.

Anyway, to begin again, Mike Egenton, Executive Vice President, New Jersey State Chamber of Commerce. You're familiar with my association and the many years testifying before you.

The general business community understands that infrastructure resilience is not simply an environmental issue; it's an economic competitive issue. Every time a major storm disrupts power; floods a roadway; damages a water system; or prevents employees from getting to work, businesses lose productivity and our state's economy is impacted. So, our goal should not simply be to recover from the next storm, but to better prepare before it arrives.

The State should develop a statewide priority list of critical infrastructure whose failure would have the greatest economic and public safety consequences, and prioritize resilient investments accordingly. This effort should be guided by a comprehensive long-term resilience plan that identifies the State's most significant vulnerabilities; establishes clear priorities; and outlines measurable goals for addressing them. A consistent plan will help provide continuity across administrations, and create a clear roadmap for strengthening New Jersey's infrastructure over the next decade and beyond.

State Chamber supports a continued investment in our utility resilience. New Jersey's utilities providers have made significant investments over the years to harden their infrastructure and improve response times. The reality is that no one can predict the frequency or severity of future weather events. As conditions continue to evolve, resilience must remain an ongoing partnership between the utility, the regulators, the policymakers, and the private sector to ensure our energy communications and water systems are as reliable as possible.

We should also investigate and expand upon public-private partnerships. I'll give you a great example of one of New Jersey's best success stories in revitalization. I use the example of New Brunswick, which 40 years ago looked like a very different city than it looks today. And, the reason I bring this up is because the government and the leadership there both on the local and State level, a gentleman by the name of Senator John Lynch, and some of my members -- including Johnson & Johnson, Robert Wood Johnson University Hospital, Rutgers University, and again, the State and local government -- working together to transform that city. That

collaborative model should be replicated wherever possible. Businesses are not simply stakeholders; they are partners who can help invest in long-term infrastructure improvements that support the community.

I want to also bring up housing. Expanding appropriately, located-- And, I call it “workforce housing.” Affordability has been the buzzword that everybody is using. When I refer to housing, I refer to -- relate it to our workforce. Our mothership, the U.S. Chamber of Commerce, has appropriately recognized workforce housing as an economic issue. When employees cannot afford to live near where they work, longer commutes increase congestion; strain on the transportation infrastructure; make recovery from disruptions more difficult. At the same time, we must be willing to have difficult conversations about where and how we continue to build and re-build. Some communities have experienced devastating flooding multiple times. Repeatedly rebuilding the same properties may not be the most sustainable long-term solution. I mean, we’ve all heard the saying, “What is the definition of insanity? Doing the same thing over again and expecting a different result.”

We must encourage appropriately located workforce housing in areas that can safely accommodate growth, while also calling on the Federal government to expand incentives for voluntary buyouts and relocation efforts. Where buyouts are appropriate, acquired properties could instead serve as flood storage, open space, and other uses that reduce risk for the surrounding community and give homeowners a meaningful option. As you all know, these are never easy decisions, but they deserve at least thoughtful consideration.

I want to briefly talk about my organization's historic support on the Green Acres program that started in 1961 to protect open space and parkland. And, in 1995, the State added the Blue Acres program to buy the flood-prone homes and turn them into natural green space. Together, these programs have preserved hundreds of thousands of acres and served as a national model for conservation and climate resilience. As I said, the State Chamber was actively involved in supporting both those bond initiatives, because preserving strategic lands and creating natural flood mitigation areas are smart investments. Protecting open space today can reduce flood damage tomorrow while improving quality of life for residents and businesses alike. The State has, as I mentioned, historic success in passing these types of questions. So, obviously, this is something we should re-evaluate and consider again.

We should also establish more predictable funding mechanisms for communities that face recurring environmental challenges, rather than dealing with each disaster as it comes. Municipalities that experience repeated storm damage should not have to rely on always emergency funding that -- after each event to repair the same roads; the drainage system; utilities; and other infrastructures.

Another example I throw out there is, we've seen the success of the New Jersey Infrastructure Bank, in partnership with our DEP, in providing low-cost, below-market financing to local governments and private water utilities for clean water, stormwater, and drinking water infrastructure projects. Following Superstorm Sandy in 2013, the statewide Assistance Infrastructure Loan Program was authorized to supply short-term bridge disaster and relief loans. Maybe that concept again can be replicated

to go beyond just storm damage and resilient water infrastructure. States should certainly explore dedicated resilience funds, competitive grants, and other financing mechanisms that allow communities to plan; invest in projects; flood-protection drainage improvements; and infrastructure upgrades before the next disaster occurs.

With regard to resilience in modernizing our transportation infrastructure, the State should prioritize the elevation and flood proofing of repeated vulnerable roads, bridges; upgrades to undersized drainage system; improvements to transportation routes that serve major employment centers; our ports; our freight corridors; and on. We must strengthen backup power for critical facilities and communication networks, so that essential services can continue to operate during major storms. New Jersey should coordinate and leverage data to identify vulnerabilities, track infrastructure failures, and make more informed decisions where resilient investments will have the greatest impact. Every dollar invested in that mitigation and preparing for the future of economic losses will ultimately lead to protecting jobs.

So, the bottom line is, New Jersey has always demonstrated that when government, and the business community, and the nonprofit sector, and our local communities work together, we can accomplish far more than any one sector can achieve alone. Building resilient infrastructure is not simply about preparing for the next storm; it is about ensuring New Jersey remains a place where business can confidently invest, and families can live safely.

Thank you, Chairman, and members of the Committee for the opportunity to provide our thoughts. And, we look forward to our continued engagement on this critical issue.

SENATOR SMITH: Thank you.

Chairman.

ASSEMBLYMAN KENNEDY: OK, next--

ASSEMBLYWOMAN COLLAZOS-GILL: Can I ask a question?

SENATOR SMITH: Sure, go ahead.

ASSEMBLYWOMAN COLLAZOS-GILL: I will make it brief.

Hi, Mike.

MR. EGENTON: Hi.

ASSEMBLYWOMAN COLLAZOS-GILL: I will make it very brief; I know something to -- later on.

MR. EGENTON: We do?

ASSEMBLYWOMAN COLLAZOS-GILL: (laughter)

I have a question for you, Mike--

MR. EGENTON: Yes--

ASSEMBLYWOMAN COLLAZOS-GILL: --because I just want to be clear that we do support that we are in favor of the Senator -- the idea of the bonds into this project. I just want to make sure that you do support this idea.

MR. EGENTON: Yes. Look, the-- I'll say the-- I'll use the Trenton lingo. Everything-- The devil is in the details. So, obviously, we'd have to see the particulars. But, the Senator, the Chairman and I talked, and about our historic involvement. And, many years ago, you didn't see

many business associations getting involved in the ballot questions. I think it was around when Christie Whitman was Governor, on the Green Acres and the Blue Acres. We got involved in it. So, when we talked about the concept, I said, "That's something that we could certainly, potentially support." I'd have to see, obviously, as you know, the details of it.

But, I think the takeaway here is we want to be a partner in this. We realize that, as I said, the success of New Jersey is everybody all in. It's government working with my folks from the private sector. And, you know that there are a lot of private-sector institutions that call New Jersey home; that really want to remain here, invest here. I can't even begin to tell you the philanthropic contributions that they do.

Regardless of all the mandated stuff of, like, corporate business tax, and things of that nature, a lot of my members go over and beyond. And, they're also looking -- because they have their families and everyone else living here in the state as well. So, they want to be a partner with you all in the State, county, municipal level, to work together.

ASSEMBLYWOMAN COLLAZOS-GILL: The only reason I'm asking is because I think all these conversations that we're having regarding the importance and the urgency of investing in this infrastructure (indiscernible) the definition that someone came up with, which included more than physical infrastructure.

But, I think that it's really interesting because I know that Senator McKeon mentioned the Polluter Pays -- and, I understand this is not a Polluters Pay bill -- but I feel that it is, because the question is not, "Do we need it, and when do we need it?" We need that investment now. And, I think that this can also be-- I agree with Senator Smith also, that we

should have those -- both conversations at the same time, whether it is this one. But, most importantly, also, who pays for this infrastructure? Because, as we know based on the numbers that we have seen, is millions and millions and billions of dollars. Not that we -- we just can't do it right now, but in the future.

So, I just wanted-- And, I understand and I would love to be -- continue to be partners. I understand what you're saying in terms of the business community. I love that, of course; we want to be a thriving-- We want to make sure that the business community is part of this conversation. But, I just wanted to be -- again -- clear that this is a really good idea; the bonds issue is. But, it's also who pays for it?

Thank you.

MR. EGENTON: Understood.

Through the Chair, I would just add that, again, knowing your area that you represent, I'm not just talking about my big members. The Main Street small businesses want to be invested in this. And, obviously, I laid out a couple of other ideas and (indiscernible) and this will be an ongoing process.

Thank you.

Thank you, Chairman.

ASSEMBLYMAN KENNEDY: OK, next we have Eric Richard; AFL-CIO.

SENATOR SMITH: Where does labor stand on this?

ERIC RICHARD: Labor -- last but not least, I hope, Chairman.

SENATOR SMITH: No, no, not last. (laughter)

MR. RICHARD: I think it's still good morning, so good morning, Chairman Kennedy; good morning, Chairman Smith; good morning, members of the Committee.

Thank you very much for the opportunity to speak to you today.

My name is Eric Richard; I am the Legislative Director for the state AFL-CIO. And, I appreciate the opportunity to present some of our thoughts on workforce-related issues with flood mitigation.

As we've stated before, flooding is overwhelming stormwater drainage systems; compromising infrastructure; and destroying housing. It damages and causes significant disruption to utilities and transportation networks. As the gentleman from Rutgers that spoke previously articulated, the needs to remedy these are enormous, and the construction needs to remedy these are enormous. We need to develop additional pumping stations; expand stormwater-drainage systems; and construct coastal flooding-prevention systems.

The AFL-CIO, which represents a various number of construction trades, as well as men and women in other sectors including the healthcare sector, are all significantly impacted by flooding. We had mentioned hospitals; we had mentioned transportation systems. Our members work there; our members live there. And, so, this is a significant issue for us throughout the entire state. And, we just want to say that organized labor stands ready to build a flood-resilient future here in the State of New Jersey.

Of course, we have mentioned earlier, we need a dedicated funding system. Two ideas have been already brought up here, in regard to the climate Superfund, and in regard to bonding.

And, the state AFL-CIO would like to thank the sponsors of the climate Superfund, Senator McKeon, Assemblywoman Collazos-Gill, for working with us to insert labor standards into that bill. And, we were (indiscernible) as we move forward on the budget -- I'm sorry, on the bonding bill, that please continue to work with organized labor to do the same.

And, specifically, what am I talking about? Flood mitigation brings with it the potential to create thousands of good union jobs. And, so, we would respectfully ask that, within any type of enabling legislation, labor standards be included. For construction workers, that includes project labor agreements and prevailing wage. We also have the opportunity to create jobs through labor harmony agreements and apprenticeship programs. And, of course, jobs created well beyond just construction -- they are created in supply chain and manufacturing, and these opportunities could create jobs-- Could be made through by American provisions. And, we encourage you to do that for materials.

Finally, I would just like to make a pitch, if I could. Organized labor understands the potential of this to create good jobs, and understand what's happening at the Federal level in regard to the claw back to green-energy funding. We have created a coalition here in the State of New Jersey, New Jersey Climate Jobs, which includes a whole host of unions. It's active in 12 states, including the State of New Jersey, and what we're doing is we're partnering with professionals in the academic community, primarily

Cornell University, to make recommendations on exactly the type of topics we're talking here, about flood mitigation, as well as how to promote green energy, since we now see that the funding opportunities at the Federal level are being clawed back.

So, the AFL-CIO is involved in that, as are several other unions. And, we urge the Committee, as you move forward in identifying funding for flood mitigation, to work with the AFL-CIO and work with the climate jobs coalition; work with Cornell University. They have a whole host of knowledge, a lot of which has already been brought to you today. We do respectfully ask as we proceed, please engage with Cornell; engage with organized labor. And, please consider including those labor standards in any type of enabling legislation moving forward.

Thank you, Chairman.

SENATOR SMITH: Thank you so much.

We appreciate your input. And, I am expecting that, as you're doing today, that the labor sector of New Jersey will be strong supporters of this legislation. It's good for everybody; it's not just good for the environment. It's good for protecting lives and keeping us -- our property out of danger, but also helping to put good labor people to work.

MR. RICHARD: Well, you opened this session, Chairman, by saying, "pay now or pay more later--"

SENATOR SMITH: Much more. (laughter)

MR. RICHARD: And, in preparation, I had read the most recent New Jersey Statewide Flood Resilience Initiative Report from the New Jersey Climate Resilience Council. They estimate that every dollar that's spent today will save taxpayers \$6 in reacting to flood-related

damages in the future. So, an investment today is pro-taxpayer as well as pro-worker.

And, we thank you for holding this hearing.

SENATOR SMITH: Thank you very much.

Let me ask our last panel to come up. And, then, I'm going to ask for a comment from Senator McKeon about how this legislation interacts with the Polluter Pays legislation.

So, I would like the School Boards and the League of Municipalities to come on up. And, as you're walking up, let me just point out that we'd like to make legislation as specific as possible. So, if your respective organizations can, at some point in the next 30 days, send us the projects that you think would have the biggest bang for the buck for our municipal and school board taxpayers; it would be a great thing.

So, let's-- League of Municipalities, you win because you have two people at the table. You go first.

LORI BUCKELEW: Good afternoon, Chairman, and members of the Committee.

I am Lori Buckelew, Deputy Executive Director of the League of Municipalities.

We thank you for the opportunity to speak before you.

With me today is our League President, Mayor of Elsinboro, Mayor Elwell, and he will have the bulk of our comments today.

MAYOR SEAN ELWELL: Thanks, Lori.

Good afternoon Chairman Smith, Chairman Kennedy, and members of the Committees.

As Lori mentioned, my name is Sean Elwell; President for the New Jersey League of Municipalities, and Mayor of Elsinboro Township in Salem County.

It's an honor to be here, and thank you again for the invitation to appear before you.

As League President, one of my primary goals is to ensure that municipalities have the tools, the resources, and the partnerships necessary to build stronger and more resilient communities. Achieving that goal requires a continued commitment from all levels of government, and the partnership between municipalities and State leaders is essential to our success.

As we discuss the future of resilience in New Jersey, it's important to remember why these investments matter. In just a few months, New Jersey will mark the 14th anniversary of Superstorm Sandy. The storm left a lasting impact on communities across our state. According to the New Jersey DEP, 38 lives were lost; more than 346,000 homes damaged or destroyed; and approximately two million residents lost power - many for extended periods of time.

Sandy was a defining event; but, it was not the only one. Municipalities throughout New Jersey continue to experience severe weather events that may not meet FEMA disaster thresholds, but, nevertheless, cause significant damage to homes, businesses, public infrastructure, local economies, and municipal tax bases. Since Sandy, New Jersey has made significant progress in strengthening resilience. Dune and beach replenishment projects have enhanced coastal protections in communities such as mine. Communities such as Mantoloking and Brick

have invested in physical barriers to prevent future breaches. Hoboken's ResilienCity Park now captures and stores millions of gallons of stormwater. Programs such as Blue Acres, hazard-mitigation grants, and updated building and zoning standards have helped communities rebuild stronger and smarter.

These investments have made a difference, but the work is far from complete. Despite these advancements, much of New Jersey's infrastructure was designed for a different era and a different climate. Aging stormwater systems struggle to move water efficiently due to sediment accumulation, undersized downstream capacity, vegetation growth, debris, and deteriorating pipes. The continued expansion of impervious surfaces has increased runoff volumes and placed additional stress on municipal systems. At the same time, the reliability and resilience of our electric grid remain critical concerns that must be addressed as any part of comprehensive resiliency strategy.

The New Jersey DEP recently adopted the REAL rules. While municipalities support the goal of increasing resilience, the scope and implementation of these regulations present significant operational and financial challenges. We appreciate the administration's willingness to pause implementation and reevaluate the rules' requirements and the impact to our towns.

To successfully implement enhanced resilience standards and prepare communities for future challenges, municipalities will require substantial investments in several key areas. This includes additional grant funding for Department of Public Works equipment, including trucks, street sweepers, and other stormwater management tools. Funding to hire

engineers, planners, and other technical experts necessary to evaluate the infrastructure and ensure compliance with evolving requirements. Funding to resize and modernize infrastructure using climate-adjusted precipitation models and future storm projections. Funding for master plan development or updates and reexamination reports that incorporate stormwater management, and encourage regional planning efforts, recognizing that water does not recognize municipal boundaries. Assistance in redesigning, planning, and development review processes to align with modern resilience standards. Funding for water and sewer rehabilitation projects. And, funding to modernize and expand water infrastructure.

In addition to physical infrastructure improvements, resiliency planning must address several other critical areas. Communications redundancy is increasingly important due to vulnerabilities in telecommunications and broadband networks. Communities also need enhanced post-storm debris-management capabilities, as debris removal remains one of the greatest logistical challenges following major disasters. Municipalities and municipal insurance funds should be held harmless from natural-disaster litigation resulting from aging infrastructure and weather-related conditions beyond their control. Furthermore, municipalities need access to pre-planning assistance and technical support to evaluate existing infrastructure and identify vulnerabilities before the next disaster strikes.

As a firefighter, EMT, and local elected official, I would be remiss if I did not emphasize the importance of public safety infrastructure. Fire stations, EMS facilities, police departments, and emergency operation centers must remain operational during and immediately following a disaster. Communities depend on these facilities when conditions are at

their worst. Ensuring their resilience requires continued investment in infrastructure, staffing, communication systems, backup power, and emergency equipment. These often come with significant costs that are difficult for municipalities to absorb within their already constrained budgets.

Resilience today extends beyond roads, drainage systems, and public buildings. Municipal governments increasingly depend upon digital infrastructure including municipal server cybersecurity protections; emergency communication networks; geographic information systems; data backup systems; and remote access capabilities. Any comprehensive resiliency strategy must recognize these systems as critical infrastructure, and provide appropriate funding and support for their protection and modernization.

One state program that has proven exceptionally successful is the New Jersey DEP Blue Acres program. Blue Acres represents a smart, long-term investment that prevents repetitive losses and reduces future disaster recovery costs. The numbers tell a powerful story. A 2025 New Jersey DEP report, “The Cost Effectiveness of Buyouts,” examined Manville’s 2002 Lost Valley Acquisition Project, where 37 homes were acquired at a total cost of \$6.2 million through a partnership between FEMA and the New Jersey DEP. According to the project, the project achieved a loss avoidance ratio of 1.54 by 2011 as a result of multiple flooding events -- meaning it had already saved more money than it costs in less than a decade. Following Hurricane Ida, that ratio increased to 2.49. In just 20 years, the project generated nearly two and a half times its

original cost in avoided losses, even before accounting for many of the broader community benefits associated with flood mitigation.

Municipal leaders understand the risks facing their communities, and they are willing to do their part; however, what municipalities need most are the financial resources, technical expertise, and the State partnership necessary to translate resiliency plans into resiliency projects. Every community is different; but every community benefits from stronger infrastructure, improved emergency preparedness, and forward looking planning. The decisions we make today will determine how well New Jersey's communities withstand the storms and challenges of tomorrow. Unfortunately, with the many statutory limitations placed on municipal budgets, and the increased cost of delivering essential services, resiliency of investments are often deferred in order to meet operational needs. Expanding access to funding, technical assistance, and planning resources will empower our municipalities of all sizes to take proactive steps to address the known risks and prepare for challenges that have yet to emerge.

Thank you again for the opportunity to testify today. We look forward to our continued partnership with the Legislature, the administration, and our local government partners, including the New Jersey Conference of Mayors, New Jersey Urban Mayors Association, and the New Jersey Association of Counties to ensure that New Jersey remains strong, resilient, and prepared for the future.

And, we heard your ask -- we will be issuing a--

SENATOR SMITH: Specifics--

MAYOR ELWELL: --call to our members for specific projects, absolutely.

SENATOR SMITH: Right, and let me just mention to you, the world's greatest source of information on flooding in New Jersey is at Rutgers University. They have-- And, I visited it; I was awestruck by the information that's available.

What's the name of it?

UNIDENTIFIED SPEAKER: The online version that we can find -- NJ Flood Mapper. Lucas right here runs that.

SENATOR SMITH: Lucas, what's the name of the--

UNIDENTIFIED SPEAKER: Almost to the point where (indiscernible) I can revisit it in March, see how (indiscernible)

SENATOR SMITH: Unbelievable. I had them do my house. (laughter)

SENATOR SMITH: They could go right to the house and show exactly what the risks are, and the probabilities. I mean, the-- You don't have to hire somebody to dig up the information; it's there. It's at Rutgers, and it's a great service. It *could* be a great service to the towns and the school boards of New Jersey.

But, cards and letters. We need specifics next 30 days if possible.

School boards.

JESSE YOUNG: Hello, everyone.

Jesse Young with the New Jersey School Boards Association.

Really appreciate the opportunity to provide testimony on this important topic.

And, Chairman Smith, I particularly appreciate that request that you made, and those comments in introducing this panel. Because, I think it recognizes that school buildings are a critical component of community infrastructure, as the place where so many of our young people and educators spend their time.

And, so, when we talk about investing in extreme weather resilience and hardening our community infrastructure, I think an important part of that conversation is how do we ensure that our school buildings are safe and secure for students and staff? So, I hope to provide some perspective on what those investments look like by going through some recent examples of investments that have been made, and how effective those investments were.

So, in the most recent round of school facility grants, it was in September of 2023, and the Department of Education and Schools Development Authority provided \$450 million in school facility grants. And, as part of that process, school districts applied their facility grant applications, and then the State sort of goes through a process of evaluating critical need, and prioritizing projects based on that critical need for funding approval. So, the approved projects I think provide good insight on what types of school infrastructure are most in need of repair, and therefore most vulnerable to extreme weather damage.

So, what were some common funding projects? It was (indiscernible) improvements; boilers; water heaters; roof upgrades; essential building systems like plumbing and electrical. Those were the types of critical need priority projects that the State supported in that last round of grants. And, since we've been talking a little bit about saving taxpayers'

money, I also want to note, for these school facility projects for most school districts, the way these projects are funded is the State assumes a portion of eligible cost of the projects, and the local district is responsible for whatever the State doesn't cover. The State covers at least 40% for most districts, and that percentage goes up for lower-income districts.

So, that \$450 million that the State provided, the actual cost -- or the actual value of those projects in those communities -- was about \$1 billion. So, those communities got \$1 billion worth of facility upgrades with the State paying for about 45% of it, that \$450 million. And, some recent real-life examples of storm damage in schools I think bears out some of that data. We've talked a little bit about Hurricane Ida in 2021. At that time, the Office of Emergency Management estimated that after insurance payouts, there was about \$42 million in repairs that were still needed across about 50 schools that were damaged and 10 colleges and universities. Some of the hardest hit schools, the costliest repairs for those schools that they needed additional funding for, were HVAC systems; boilers; water pumps. So, those were the types of infrastructure that have been most in need and most damaged by past storms.

And, then, last but not least, I know it's not "infrastructure," per se, but I wouldn't be an education advocate if I didn't make a plug for education programs as well. Our state's academic standards require schools to teach students about climate science, and how the climate shapes the environment. And, how students can use that knowledge to benefit their local communities and serve their local communities. So, the more resources that we provide for schools in implementing that instruction with

fidelity, and training teachers on that instruction, I think the more that we empower our communities to tackle this problem head on.

So, thank you very much; appreciate the time.

SENATOR SMITH: And, we appreciate School Boards taking the time to weigh in.

Again, cards and letters. Where can we get the best bang for our buck?

And, we are at the end. Who said we couldn't get it done by 12:30?

But, our last task-- And, this-- By the way, we didn't even have a lot of questions from members because we didn't have time. We wanted to get all the information that starts the discussion on the table. I'm sure we're going to have continuing discussions both in my Committee on the Senate side, and on the Assembly side in Assemblyman Kennedy's Committee. So, we're just starting the discussion today.

But, as you walked in today you saw "protestors." They weren't protesting; they were saying, "Don't forget the Polluter Pays legislation," which has the major oil companies of the world being involved with a \$50 billion fund to either fund the damages that have occurred from global climate change, weather change -- whatever you want to call it -- which is now, John, out of the Assembly Appropriations Committee; out of the Senate Appropriations Committee, as I understand it. We're further along than we were last year. Last year, it only came out of Senate Appropriations. But, it's still early in the term, so we're making a lot of progress.

But, you may be out there as a citizen saying, "Wait a minute, if we're going to have the oil majors pay \$50 billion, why do we need--" looking right now as a \$5 billion bond issue? And, John is going to explain, but in a nutshell, we're rolling the dice on the Polluter Pays. Ultimately it's going to go-- Right now, there's litigation on the legislation in several states. It's ultimately going to get to the Supreme Court. You may have more confidence in the Supreme Court than I do, but let me, John, if I can throw this difficult task -- what's the relationship between the two bills?

SENATOR McKEON: Sure.

Senator Smith, thank you. And, I think everybody here -- and, so many familiar faces -- thanks you each year for your leadership, and bringing us down to the beautiful Jersey Shore, talking about a difficult topic and then turning it in-- Sorry. It's really important what I say. (indiscernible) giving you accolades. And, I won't get your wife mad at me, because she is expecting a bunch of people in a little while, so I won't go too long.

But, we all appreciate your legislative leadership for so many years on everything having to do with the environment. Bringing us down here is just one of those things, every July or August, talking about an important topic -- plastics being one of them, as I recall very well. And, then, not just having a good time -- as we will -- but then turning that into legislative ideas, and ultimately getting them to the point of improving the laws for New Jersey.

So, thank you.

And, for everybody else, if you're going to expect it, I'm going to provide a legal argument as to why it is that the Polluters Pay Bill will

ultimately be deemed constitutional. I can-- I think it will, but there's no guarantee, that's for certain. And, we should start and end there.

I'm just going to also reference my colleague and friend, Assemblywoman Collazos-Gill, who has been a great leader in the Assembly on this topic of Polluters Pay.

And, I'll tell you all-- Senator Smith, you said the most exciting thing. We're six months into the term. Maybe seven months, with the summer. We're already out of both committees, both Appropriations and Budget Committee, and we have a year and a half to go -- not that we expect it to take it that long, but it's really great. And, for all of you -- that doesn't happen without the approval and support of the Senate President; it doesn't happen without the approval and support of the Speaker. So, I know in their hearts that they want to see this succeed, or we wouldn't be as far as we did. So, let's be optimistic and keep -- not the pressure on, but all of our fervor for the bill. Very optimistic.

So, let's just talk about, like, why, and how they connect here. There are-- And, I promised these two, because they're next to me, I said, "I'm going to sing a song eventually," and I really am. Maybe you'll all join. But, at the end of the day, some just very, very interesting numbers -- some of which you heard, but I don't want us to lose them. I mean, it's crazy. Since I was born -- and, I know I'm old -- but since I was born, the number of 90-degree days in New Jersey -- I don't know about the world; in New Jersey -- have increased by 40%. Think about that -- in not a very long period of time.

As sad as it is that globally, temperatures have gone up 1.5 degrees since we've been measuring, in New Jersey it's 3.5. Think about

that. That's significant. We can all talk about this July, it's been amazing. I mean, beyond the fact that there were 90-degree days inland back in April, I mean, July first through sixth, the 14th through the 16th; the 27th to 29th; August sixth to August 10th. A bunch of days-- I mean, a lot of us have been around for a while; do you ever remember it this hot for this long, for this often? And, for that matter, with smoke billowing from Canada that we could actually literally see?

So, I mean, we're there. We are there. The professor talked about \$200 million just to hold value. Two-hundred million -- two-hundred *billion*, just to hold value. By God, the \$5 billion with Senator Smith, who's going to lead, is important and it's real. But, that's tip money. Frankly, the \$50 billion that the Polluters Pay Act is -- think about it; it gets us about 25-30% of where we have to be as to what the investment needs over the next 20 years.

So, I just say as follows: When it relates to what's equitable here, early on in the process we all talked about the billions of dollars of tax breaks that big oil is getting. The rollback, and all kinds of environmental regulations. Opening up Federal lands for drilling and otherwise salad days. But, by happenstance of world events, think about the money that's being made. In the second quarter -- that means April to June of 2026 -- I'll just mention two companies. Exxon went -- made \$14.5 billion. And, that's compared to only \$7 billion in the quarter the year before. Chevron, as opposed to \$3 billion, made \$12 billion. If they were ever in a position to fund what otherwise is going to come out of all of our pockets, never more than now. That's a whole other story, because it is coming out of our pockets relative to the worldwide economy and how oil prices work. And,

again, that argument that everybody had, “Oh, gas prices are going to go up if we pass that--” everybody realizes now, the price of oil is a worldwide commodity, that’s how it’s set, and our (indiscernible) will have nothing to do with that.

So, as I mentioned the billions that those two companies make, when you look at the 82 companies that would be affected, just the extractors -- oil companies by our bill -- they made over \$150 billion more this quarter than they did the quarter last year, all because of the Gulf War -- whatever it is that we’re calling it. So, just keep that in mind as to, do we pick them, or do we pick the taxpayers? Real, real critical.

So, all of you guys, I think the-- Senator, it was perfect how these guys ended up. We heard from people from utilities, and transportation, and how all of that needs to happen. Our schools, our towns -- all of the infrastructure. You’re all right; we know that. And, the way that the Polluter Pay Bill is drafted, every group is going to share in that commensurate with maybe not all that they need, but equally so, and all with good paying union jobs.

And, I appreciate the shoutout from the AFL, who worked hard with us, and I’m praying that the trades will come around, too, and pick who should be their priority in all of this.

So, here’s the song. I won’t sing for real-- (laughter)

SENATOR McKEON: Do you remember the lyrics, (singing) “Sunny days, sweeping the clouds away. I’m going to where the air is sweet?” *Sesame Street*-- (applause)

SENATOR McKEON: Last week had a special episode. And, it includes pouring rain; thunder; wind; Oscar the Grouch’s can gets kicked

over. And, that's to deal with the fear of the kids as it relates to what we're seeing all over our country and certainly in this area -- accentuated in urban areas. The fear that comes from this extreme weather that comes from global warming.

That's to make the kids feel better. We're the adults in the room. And, we have to know what our challenges are.

So, between Senator Smith's leadership with his \$5 billion bird in hand, and with the \$50 billion that should come from those who have profited from the polluting of our environment, I hope that you all join us.

And, I appreciate you all.

Thank you. (applause)

SENATOR SMITH: You just heard from one of the greatest leaders on environmental issues in the State of New Jersey. Now, let's get the job done.

Chairman Kennedy, I thought we did a decent hearing; a lot of information. But now, the hard work comes, and we've got to get this legislation passed.

Is it OK to adjourn the meeting?

ASSEMBLYMAN BHALLA: Chairman Smith--

SENATOR SMITH: We've got an Assemblyman who wants to speak.

ASSEMBLYMAN BHALLA: Just a-- I drove two hours down here, and I had the great opportunity to listen--

SENATOR SMITH: You get a chance to speak.

ASSEMBLYMAN BHALLA: I think that the public also wants to know what we think on this side of the aisle. So, just a couple of closing thoughts.

SENATOR SMITH: Sure.

ASSEMBLYMAN BHALLA: And, I really speak not so much from a first-term legislator, but as an eight-term mayor who first came into Hoboken. And, as the gentleman from the utilities and sewerage authority said, when it would rain in Hoboken, we'd be walking in raw sewage up to our knees. And, now, through a journey -- a climate journey -- in Hoboken, combining green infrastructure; nature-based solutions; along with grey infrastructure, we are a community in New Jersey that has solved the flooding problem. We have eliminated flooding from the State of New Jersey -- and figured out how to pay for it, too.

So, I speak from that standpoint, and I had a great experience listening to everyone here, especially folks from the Chamber of Commerce; others who all agree that-- From my perspective, this is not a partisan issue that we're here today at all. When it floods and it rains, it doesn't pick Democratic or Republican homes, or businesses to cause damage. It causes damage to everybody. And, everybody has to pay for it. So, we should look at this not as being from one party or another, but being New Jersey residents who want to be more resilient as a state collectively, in a nonpartisan approach.

And, the Bond Act really brings that -- brings that home. Which is why it's of great interest, and I thank Senator Smith for his leadership, along with the advocates, for bringing us together.

Another point is that an ounce of prevention is worth more than a pound of cure on the opposite end. So, that was another theme that really resonated. I'm happy that even more conservative groups, like the Chamber of Commerce and the U.S. Chamber of Commerce, says that every dollar of adaptation investment gives you \$13 of benefits, in terms of lost -- avoiding damages and economic recovery.

I also just think that local action, as a former mayor, is very important. We need to give mayors across New Jersey the ability to tap into their funding sources. We use bonding at the municipal level to pay for our police cars; to pay for our roads; to pay for our municipal buildings, our senior centers. All sorts of infrastructure that is non-optional -- meaning that it is essential. But, we have to start thinking about climate-adaptation infrastructure in that same bucket as non-optional. It's not discretionary; we have to invest in it at the local level through municipal bonding in the same way we pay for other forms of capital improvements.

And, then just lastly, to close, the Senator correctly identified -- or suggested -- that we need to identify specific projects and priorities. I don't think the Polluters Pay Act and any perspective bond measure are mutually exclusive. We should be moving forward on a parallel track, and discussing them on a parallel track. The Polluters Pay would inject \$2.5 billion per year -- we're talking about \$50 billion over 20 years. That is nothing to sniff at, and it goes to climate justice; it goes to equitable distribution of risk reduction. So, these are important issues to address, both in the context of the Polluters Pay Act, as well as bonding -- State bonding, which is not perfect, but you can't let perfect be the enemy of good. It's essential infrastructure.

But, that Polluters Pay Act has already created a framework by which you can identify those projects, through the climate adaptation resiliency -- what was it -- it was a trust. They identify which projects are priorities; they recommend those projects to eight different departments within the administration -- the DEP, the DOT, the Department of Community Affairs, the BPU, so on and so forth -- and, then, the final gatekeeper is the Legislature. The Legislature takes those projects through the Polluters Pay Act, and decides which ones we're going to appropriate in any given appropriations act. That is also a framework worth consideration as we move forward with both pieces of legislation.

So, I just wanted to offer those closing thoughts to you--

SENATOR SMITH: I appreciate the comments.

And, by the way--

ASSEMBLYMAN BHALLA: I appreciate it--

SENATOR SMITH: --you make a great point. All these legislators may have driven hours to be here, and if anybody feels the need to -- that they want to say something now, or at the later hearings, you're welcome to do so.

Anybody feel like they want to say anything?

SENATOR TIVER: I might add a little bit.

SENATOR SMITH: Go for it.

SENATOR TIVER: So, thank you for putting this together -- both Chairmen, by the way.

And, I mention fairness in equity. So, I do think when it comes to fairness in equity in distribution of funds throughout the State of New

Jersey, we typically do not see as much in the southern half of the state -- particularly here in Ocean County, where we are right now.

You talked about projects, as far as disaster and things like that. In Stafford Township -- where I used to be mayor before I joined the Legislature -- we're currently working on a second drainage basin on either side -- on the other side of Route 72 specifically because of resilience in the event of a flood; a high flood area, taking care of that.

SENATOR SMITH: Send in your cards and letters.

SENATOR TIVER: What's that?

SENATOR SMITH: Send in your cards and letters.

SENATOR TIVER: Well, it's about -- it was about 12 years in the making, so-- And, it did take a whole lot of (indiscernible) including Federal funding for that project.

But, specifically, you talk about disasters that can occur. Long Beach Island during the year has about 10,000 people -- the population is small, so 100-150,000 people this time of year. So, part of the justification for that drainage, additional drainage basin. If we do get that disaster, there's no way out; you can only get maybe to the Parkway if you're lucky, and then you either go north and south, but you cannot go west. So, that will help.

But, also, we need to look at the smaller roads, like Route 9. Highly congested as more people move down here.

SENATOR SMITH: Cards and letters, cards and letters.

SENATOR TIVER: Well, they're coming. (laughter)

SENATOR SMITH: Last call for any comments. (no response)

If not, thank you all for participating in a very fine meeting.

(MEETING CONCLUDED)