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;;;Boston City Council 180326

>> CAN EVERYONE HEAR ME NOW?

A DOES THAT SOUND BETTER?

CHECK, CHECK, GREAT.

GOOD MORNING, EVERYONE AND
WELCOME TO TO CITY COUNCIL,
BOSTON CITY COUNCIL, MY NAME IS
MICHELLE WU AND CHAIR OF OUR
COUNCIL COMMITTEE ON PLANNING,
DEVELOPMENT AND TRANSPORTATION.
I AM JOINED BY MY COLLEAGUE CITY
COUNCILOR FROM DISTRICT 2, ED
FLYNN, AND CITY COUNCILOR,
DISTRICT 5, MCCARTHY AND I AM
SURE OTHERS WILL BE JOINING US
AS WELL.

TODAY WE ARE HERE TO HAVE OUR
HEARING ON DOCKET NUMBER 0291,
THE HEARING ON FLOODING IN THE
CITY OF BOSTON.

WE ARE JOINED BY A NUMBER OF
PANELISTS, SO I WANT TO, ONE,
GIVE EVERYONE A QUICK REMIND
THEY ARE IS A PUBLIC HEARING
BEING RECORDED AND LIVE
STREAMED, WHICH WILL BE
REBROADCAST ON COMCAST, CHANNEL
8, RCN CHANNEL 82 AND VERIZON
1964 AS WELL AS THE BOSTON, CITY
OF BOSTON WEBSITE, SO JUST TO
GIVE A QUICK SUMMARY OF HOW THIS
WILL WORK, WE HAVE OUR FIRST
PANEL REPRESENTING CITY AGENCIES
AND PARTNERS, I AM GOING TO
STICK TO A HARD CUTOFF AT 1145,
INCLUDING Q & A FROM COUNSELORS
AND THEN TAKE PROBABLY ABOUT
TEN, 15 MINUTES OF PUBLIC
TESTIMONY AT THAT POINT, THEN
MOVE ON TO OUR PANEL OF EXPERTS,
INCLUDING REPRESENTATIVES FROM
THE BOSTON SOCIETY OF
ARCHITECTS, UMASS BOSTON, AND
THE DEPARTMENT OF MANAGEMENT AND
THE CENTER FOR URBAN WATER SHED
RESILIENCE.
AGAIN, TAKE A FEW MINUTES OF
PUBLIC TESTIMONY AFTER THEM, AND AND
THEN FOR OUR FINAL PANEL ON

SORTS OF ACTIVISM AND COMMUNITY LEADERS WE WILL HAVE REPRESENTATIVES FROM -- KEEPERS, CONSERVATION LAW FOUNDATION AND THE GREEN RIBBON FOUNDATION. SO DO ANY OF MY COLLEAGUES HAVE AN OPENING STATEMENT TO START? WOULD YOU LIKE TO SAY ANYTHING? >> OH AND WE ARE JOINED AS WELL BY MY COLLEAGUE AND PARTNER ON MANY OF THESE ISSUES, DISTRICTS SEXY COUNCIL O'MALLEY. >> I WILL HAND IT OVER TO OUR CITY PARTNERS. EACH WILL START WITH ALLSTON AND MOVE ON DOWN, IF YOU COULD INTRODUCE YOURSELF AS WELL AS YOUR RESIDENCE FOR THE RECORD AND THEN FEEL FREE TO GIVE YOUR STATEMENT. >> HELLO. >> YES. WHEN IT TURNS RED YOU ARE ON. JUST WAIT ONE SECOND. >> GREAT. >> HELLO, MY NAME IS ALLSTON, THE I AM THE DIRECTOR OF CLIMATE AND ENVIRONMENTAL PLANNING FOR THE CITY OF BOSTON AND A RESIDENT OF EAST BOSTON. COUNCIL LOHRS, WU, O MAL, O'MALLEY, FLYNN, THANKS FORGIVING ME AN OPPORTUNITY TO SPEAK ON THIS. WE HAVE NUMEROUS EFFORTS UNDERGUY ADDRESS THE CHALLENGES OF CLIMATE CHANGE FACE BED AT THIS CITY OF BOSTON, INCLUDING SEA LEVEL RISE AND COASTAL FLOODING. MY COLLEAGUE FROM THE BOSTON PLANNING AND DEVELOPMENT AGENCY AND I WILL HIGHLIGHT SEVERAL OF THEM FOR YOU HERE TODAY. AS WE HAVE SEEN IN RECENT MONTHS, BOSTON RESIDENTS ARE ALREADY AFFECTED BY EXTREME RAIN, SNOW, FLOODING AND INCREASED HEAT. WITH CLIMATE CHANGE, THESE TRENDS WILL LIKELY CONTINUE. FOLLOWING EACH OF EVENT -- EACH MAJOR EVENT WE GO THROUGH A THOROUGH ANALYSIS OF WHAT WENT

WELL AND WHERE IMPROVEMENTS CAN BE MADE. AND SIMILARLY AFTER THE EVENT IN JANUARY, WE LAUNCHED THIS PROCESS FOCUSING ON ANALYSIS OF FLOODING AND HOW WE RESPONDED. SO WE ARE BETTER PREPARED FOR THE NEXT EVENTS IN THE NEAR TERM.

WE ARE ALSO TAKING STEPS TO ENSURE WE ARE PREPARING THE CITY FOR THE FUTURE IMPACTS OF CLIMATE CHANGE.

IN DECEMBER OF 2016, THE CITY PUBLISHED CLIMATE READY BOSTON, A COMPREHENSIVE REPORT THAT ADDRESSED THE CITY'S VULNERABILITIES AND OUT LINED THE STEPS THE CITY MUST TAKE TO ADDRESS THE EFFECTS OF CLIMATE CHANGE.

THE REPORT WAS DEVELOPED IN COLLABORATION WITH THE BOSTON GREEN RIBBON COMMISSION AND PRODUCED BY A TEAM THAT INCLUDED LOCAL CLIMATE SCIENTISTS AND EXPERIENCED ENGINEERS, PLANNERS AND DESIGNERS.

CLIMATE READY BOSTON UPDATES THE PROJECTIONS OF HOW MUCH OUR CLIMATE WILL CHANGE AND IDENTIFIES WHERE WE ARE MOST VULNERABLE AND PROPOSE STEPS FOR BECOMING MORE RESILIENT TO THE CHALLENGES AHEAD. THE REPORT REPS THAT WE ADOPT A LAYERED APPROACH TO RESILIENCE, THAT WE PLAN AND DESIGN PROTECTIVE SHORELINES, RESILIENT INFRASTRUCTURE, RESILIENT NEW DEVELOPMENT AND ADAPTIVE BUILDINGS.

CLIMATE RESILIENCY IS AN INTEGRAL PART OF ALL OF OUR MAJOR PLANNING EFFORTS, INCLUDING IMAGINE BOSTON 2030, GO BOSTON 2030 AND RESILIENT BOSTON.

TO BUILD ON THAT WORK THE CITY HAS LAUNCHED PROJECTS IN SEVERAL NEIGHBORHOODS TO IDENTIFY FLOODING SOLUTIONS AT THE MOST CRITICAL FLOODING PATHWAYS. PROJECTS ARE CURRENTLY UNDERWAY

IN EAST BOSTON, CHARLESTOWN, SOUTH BOSTON AND DORCHESTER TO ADDRESS HOW TO MODIFY OUR SHORELINE TO PROTECT THE CITY FROM CURRENT AND FUTURE FLOODING RISK.

IN THE FALL OF 2017 THE CITY COMPLETED COASTAL RESILIENCE SOLUTIONS FOR EAST BOSTON AND CHARLESTOWN.

WITH THE RELEASE OF THIS FIRST NEIGHBORHOOD RESILIENCE REPORT, MAYOR WALSH ANNOUNCED INITIAL RESILIENCY MEASURES TO PROTECT THEM FROM CURRENT AND FUTURE FLOODING.

THESE PROJECTS INSTALLING A DEPLOYABLE FLOOD WALL IN THE EAST BOSTON GREENWAY AND ELEVATE A GO SECTION OF MAIN STREET IN CHARLESTOWN CAN BLOCK LIKELY PATHWAYS FOR CURRENT FLOOD RISKS.

THESE TWO ACTIONS WOULD COST LESS THAN 4 MILLION TO COMPLETE AND PROTECT MORE THAN 4,500 RESIDENTS IN AT LEAST 130 BUSINESSES, AND SOME CRITICAL INFRASTRUCTURE SUCH AS TRANSPORTATION TUNNELS. MORE EXTENSIVE MEASURES OUTLINED CAN BE BUILT AND EXPANDED OVERTIME.

IN THE FALL OF 2017, THE CITY ALSO INITIATED THE CLIMATE READY SOUTH BOSTON PROJECT.

SIMILAR TO THE EAST BOSTON AND CHARLESTOWN PROJECTS, THIS ONE WILL IDENTIFY THE SHORT AND LONG-TERM SOLUTIONS THAT PROTECT SOUTH BOSTON AND PATHWAYS INTO THE REST OF THE CITY.

WE EXPECT THE REPORT TO BE COMPLETED LATER THIS YEAR.

THE CITY ALSO RECENTLY LAUNCHED THE -- VISION AND PLANNING PROCESS WHICH WILL INTEGRATE COASTAL AND STORM WATER FLOOD PROTECTION CONSIDERATIONS INTO THE PARKS UPDATED PLAN.

WE EXPECT TO BEGIN A SIMILAR STUDY ON DOWNTOWN AND THE NORTH END IN THE NEAR FUTURE.

COORDINATION IS A CRITICAL

COMPONENT OF THESE ACTIVITIES,
SO INVOLVED IN ALL OF THESE
EFFORTS OUR COLLEAGUES AT WATER
BOSTON CITY AND SEWER
COMMISSION, THE AGENCY, THE
MBTA, OUR PARTNERS AT THE STATE,
THE BOSTON GREEN RIBBON
COMMISSION, LOCAL UNIVERSITIES
AND OTHER ORGANIZATIONS.
WE ARE ALSO GETTING INPUT FROM
LOCAL BUSINESSES, RESIDENTS, AND
OTHER MEMBERS OF THE COMMUNITY.
AS PART OF CLIMATE READY BOSTON,
AND THE NEIGHBORHOOD PLANNING
PROCESSES, WE HAVE HOSTED OPEN
HOUSES, CONDUCTED COMMUNITY WIDE
SURVEYS AND FOCUS GROUPS.
WE HAVE RECEIVED VALUABLE INPUT
FROM HUNDREDS OF COMMUNITY
MEMBERS ON THEIR PRIORITIES FOR
DESIGN AND EVALUATION CRITERIA
AND FEEDBACK ON INITIAL OPTIONS
FOR PROPOSED SOLUTIONS.
WE WILL HAVE ANOTHER OPEN HOUSE
FOR THE SMOKILY PARK VISIONING
ON APRIL 11.

MY COLLEAGUE FROM THE BOSTON
PLANNING AND DEVELOPMENT AGENCY
WILL NOW SPEAK TO RESILIENT
DEVELOPMENT AND ADAPTIVE
BUILDING .. THANK YOU FOR THE
OPPORTUNITY TO BE HERE TODAY AND
I WOULD BE HAPPY TO ANSWER ANY
QUESTIONS.

>> THANK YOU, ALLSTON, WE WILL
GO TO -- AND QUESTIONS.

>> THANK YOU, COUNSELORS
O'MALLEY AND FLYNN.

>> I AM COMMUNITY DIRECTOR OF
ENVIRONMENTAL PLANNING FROM THE
BOSTON PLANNING AND DEVELOPMENT
AGENCY. THIS IS A NEW TEAM AT
THE MBTA THAT FOCUSES
EXCLUSIVELY ON CLIMATE CHANGE
UNDER THE PLANNING DEPARTMENT.
AS THE OWNER OF NUMEROUS
WATERFRONT PROPERTIES THE MBTA
REPORTS UNPRECEDENTED FLOODING
IN THE JANUARY AND MARCH STORMS,
INCLUDING FLOODING OF STREETS
AND HARBOR WALK IN THE
CHARLESTOWN NAVY YARD, WHARFS
AND THE FLYNN MARINE PARK, WHILE
MINIMAL DAMAGE WAS REPORTED THE

INCONVENIENCE OF LIMITED ACCESS TO THE ROAD CLOSURES AND OTHER CLOSURES IS AN IMPACT ON BUSINESSES AND HOW PEOPLE GET ALONG THE WATERFRONT.

WE ARE COORDINATING WITH THE OFFICE OF EMERGENCY IN MANAGEMENT IN HOW TO RESPOND TO TRACK THESE TYPE OF FLOODING EVENTS AND HOW TO RESPOND TO THESE FLOODING EVENTS.

IN THE 22 YEARS I HAVE WORKED FOR THE CITY IN WATERFRONT PLANNING I SEE THE URGENCY IN THAT THE CITY IS DELIVERING.

IN LESS THAN A YEAR WE MADE CLIMATE RESILIENCY CENTRAL TO ALL OF OUR PLANNING EFFORTS, INCLUDING IMAGINE BOSTON 2030. WE HAVE UPDATED BOSTON ZONING CODES ARTICLE 25 AND 37, WHERE DEVELOPMENTS MUST DEMONSTRATE RESILIENCE TO SEA LEVEL RISE AND OTHER IMPACTS TO CLIMATE CHANGE. THOROUGHLY ANALYZED THE CITY'S INTERAGENCIES GREEN BUILDING COMMITTEE.

SUFFOLKS DOWN, A PROJECT IN EAST BOSTON -- [FEEDBACK]

>> JUST CONTINUE.

>> SUFFOLKS DOWN, A PROJECT IN EAST BOSTON WILL ELEVATE ITS ENTIRE PROJECT SITE 40 INCHES TO ADDRESS SEA LEVEL RISE AND PROJECTED SEA LEVEL RISE BY 20, 2017.

>> GE IS RETRO FITTING ON THE FOUR-POINT CHANNEL, HISTORIC WHARF BUILDING, TO BE PRESIDENT ELECTED FROM A 500 RAIN EVENT. THE WATERFRONT, THEIR NEW BUILDINGS WILL BE DESIGNED TO BE RESILIENT TO 40-INCH SEA LEVEL RISE AS WELL.

I JUST WANT TO NOTE THAT MASSACHUSETTS IS NUMBER ONE NATIONALLY WITH LEAD BUILDINGS IN 2017, THE MAJORITY OF THIS 2.5 MILLION SQUARE FEET IS WITHIN THE CITY OF BOSTON, AN EXAMPLE OF HOW WE ARE PRODDING THE DEVELOPMENT COMMUNITY ALONG TO REFLECT CLIMATE CHANGE. THE DISPOSITION OF CITY PROPERTY

TO REQUEST FOR PROPOSALS NOW
REQUIRE PROPOSALS TO PLAN AND
DESIGN FOR CLIMATE CHANGE.
OTHER PLANNING INITIATIVES
UNDERWAY WHEN WE ARE ADDRESSING
CLIMATE CHANGE INCLUDE THE
DOWNTOWN WATER I DON'T WANT
MUNICIPAL PLANNING AREA, DUDLEY
SQUARE, COLUMBUS CORNER AND THE
ANDREW CARE.

OUR ACTIONS ARE GUIDED BY THE
MOST ACCURATE FLOOD MODELING
AVAILABLE.

THE CITY OF BOSTON HAVE MADE
DELIBERATE STEPS TO UNDERSTAND
MORE ABOUT OUR VULNERABILITY TO
FLOODING, COASTAL STORMS AND SEA
LEVEL RISE, AND 2014 THE CITY
APPEALED PRELIMINARY FLOOD
INSURANCE RATE LAPSE FOR BOSTON
BASED ON AN INDEPENDENT
ANALYSIS.

OUR APPEAL WAS BASED ON
SIGNIFICANT ERRORS AND
INCONSISTENCIES IN FEMA'S
MAPPING AND FLOOD STUDY APPROACH
AND USED THE APPEAL PERIOD AS AN
OPPORTUNITY TO CONDUCT MORE
DETAILED AND ACCURATE HYDRONAAH
MICK FLOOD MODELING FOR THE
HARBOR SO THE DURATION OF WAVE
ACTION AND FLOODING WITHIN
BOSTON AND ITS WATER FRONT
NEIGHBORHOODS.

THE CITY PREVAILED IN THE AT THE
NAAH APPEAL PROCESS AND BENEFITS
FROM ACCURATE FLOOD MODELING AND
MAPPING.

, OUR MODELING AND PROJECTIONS
FOR SEA LEVEL RISE ARE
CONSISTENT WITH OTHER STATE
AGENCIES, INCLUDING MASS DOT WHO
ARE ACTUALLY USING THE BOSTON
HARBOR FLOOD RISK MODEL, SO NOT
ONLY IS THE CITY PLANNING FOR
OUR, OUR CERTAIN PROJECTIONS OF
SEA LEVEL RISE, STATE AGENCIES
ARE PREDICTING FOR SAME KIND OF
RISK AND THAT ANALYSIS SO THERE
IS CONCURRENCE AND CONSISTENCIES
IN WHAT WE ARE DOING, MASSPORT
HAS FLOOD PROOFING GUIDANCE FOR
ALL OF THEIR PROJECTS AND THEIR
FACILITIES, INCLUDING THE

AIRPORT AND THEIR PORT FACILITIES.

CONSISTENT WITH GOVERNOR BAKER'S EXECUTIVE ORDER, 569, AND JUST RECENTLY COMPLETED A SUBSTATION IN THE RAYMOND L. FLYNN MARINE PARK.

\$150 MILLION SUMMATION IS ON A CONCRETE AND STEEL PLATFORM, BUT STILL 15 FEET ABOVEGROUND, TO WITHSTAND THE WORST STORMS AND TIDAL SURGES, TO SUPPORT THE PLATFORM NEARLY 500 PILINGS WERE DRILLED AS DEEP AS 80 FEET INTO THE GROUND, AN EXAMPLE OF HOW THE UTILITIES ARE RESPONDING TO SEA LEVEL RISE AND COASTAL FLOODING.

OUR OBSERVATIONS ARE NEW BUILDINGS THAT ARE BEING BUILT AGO THE WATERFRONT ARE RESILIENT BUT ISLANDS OF RESILIENCY AND THE ROADWAYS GOING TO AND ALONG THESE BUILDINGS ARE VULNERABLE TO FLOODING BUT THE GREATEST VULNERABILITY IS OLDER BUILDINGS.

WE VALUE OUR HISTORIC BUILDINGS, THE AUTHENTIC STREET-SCAPE OF THE CITY, HOW DO WE RETRO FIT AND ADAPT THESE ARCHITECTURAL ASSETS, DRY PROOF THEM FROM FLOODING?

WE ARE REVIEWING ZONING MECHANISMS TO ADDRESS NEW GROWTH, BUT ALSO RETRO FITTING THESE BUILDINGS, IN NEIGHBORHOODS AND IMPLEMENT DISTRICT SCALE SOLUTIONS SO THE MECHANISMS THAT ALLISON JUST MENTIONED, WE WOULD LIKE TO CAPTURE THROUGH ZONING OVER LAYS AS WELL.

MOST LIKELY OUR FIRST ZONING APPROACH WILL BE THROUGH AN OVERLY DISTRICT WHERE WE HAVE MAPPED OUT THE 40-INCH SEA LEVEL RISE FOR THE CITY OF BOSTON THAT WILL ACT AS AN OVERLAY DISTRICT, AND WILL, WE WILL STOP BUILDING REQUIREMENTS FOR NEW DEVELOPMENT AND RETRO FITTING EXISTING BUILDINGS.

WE ARE CHALLENGED BY THE

IMPLEMENTATION OF THESE DISTRICT SCALE SOLUTIONS THAT IS COMING UP IN OUR SOUTH BOSTON READY PROCESS.

THIS INCLUDES PERMITTING, HOW YOU ALTER THE SHORELINE OF BOSTON HARBOR, HOW DO YOU FILL BOSTON HARBOR?

THESE ARE THINGS THAT WE ARE WORKING WITH VARIOUS FEDERAL, STATE AGENCIES INCLUDING THE ARMY CORPS OF ENGINEERS.

THE GOVERNANCE, SO WHO MANAGES AND OPERATES THESE FLOOD DEFENSE MECHANISMS, IF THEY ARE GOING TO ACT LIKE PARKS OR PHYSICAL STRUCTURES, WHO IMPLEMENTS THEM AND MAINTAINS THEM FROM DAY TO DAY?

AND ALSO FUNDING.

THAT IS ANOTHER GREATER CHALLENGE IS REQUEST HOW THESE MECHANISMS ARE FUNDED AND MAINTAINED THROUGHOUT THE FLOOD RISKS.

WE THANK THE COUNCIL'S INPUT ON COLLABORATION ON PARTICULARLY THE TOPIC OF FUNDING.

A LITTLE BIT OF UP BEAT NEWS IS BOSTON TACKLED THESE COMPLEX FLOODING AND ENVIRONMENTAL CONCERNS IN THE PAST AFTER THE 1950'S HURRICANE, THE STATE MOBILIZED THE METROPOLITAN DISTRICT COMMISSION TO TAKE ON FLOOD CONTROL MEASURES THROUGHOUT THE COMMONWEALTH, BUT PARTICULARLY IN BOSTON, THAT INCLUDED DREDGING THE RIVER, ALTERING THE CHARLES RIVER, THEY TOOK OVER THE DAMS THROUGHOUT THE COMMONWEALTH, THAT IS AN EXAMPLE OF HOW A STATE AGENCY WAS MODIFIED TO ADDRESS FLOODING RISKS AT THAT TIME.

THE BOSTON HARBOR CLEANUP, THE FORMATION OF THE NWRA IS AN EXAMPLE OF HOW YOU HAVE GOT A STATE AGENCY THAT WAS CREATED TO IMPLEMENT, BUILDING IMPLEMENT A DISTRICT SCALE POLLUTION COLLECTION, NOT JUST FOR THE CITY OF BOSTON BUT FOR FOUR COMMUNITIES THAT DUMP THEIR

SEWAGE INTO BOSTON HARBOR.
AND ALSO THE CENTRAL LOTTERY
PROMISE, WITH THE CENTRAL
LOTTERY PROMISE WE SAW ADVANCED
ENGINEERING THAT NO ONE HAD SEEN
BEFORE THROUGHOUT THE WORLD,
INCLUDING FREEZING OF LAND AND
JACKING TUNNEL SECTIONS UNDER
RAILS, EXCAVATING THE HARBOR
FLOOR FOR NEW TUNNEL SECTIONS.
SO THESE THINGS ARE ACHIEVABLE,
BUT THEY REQUIRE CAB
INVESTIGATION AT EVERY LEVEL
WITH THE FEDERAL GOVERNMENT,
STATE GOVERNMENT AND AT THE
LOCAL LEVEL.

THANK YOU.

>> THANK YOU.

I THINK CHRIS SHEER TO ANSWER
ANY QUESTIONS THAT ARE ON HAND
AS A MEMBER OF THE TEAM THAT WAS
DESCRIBED.

SO I WANT TO, AGAIN, KEEP US TO
SCHEDULE SO I WILL JUST MAKE A
FEW STATEMENTS AND SAVE MY
QUESTIONS FOR THE END AND GIVE
EACH COLLEAGUE FIVE MINUTES.
SO ONE, I THINK THE REASONS WHY
WE ARE HERE ARE PRETTY CLEAR.
YOU ALL ARE ON TOP OF EVERY
WEATHER RELATED PROJECTION AND
ALL OF THE CLEANUP AS WELL,
UNFORTUNATELY THIS HEARING WAS
CALLED AFTER THE FIRST OF THE
STORMS AND THERE HAVE BEEN MORE
SINCE THEN, SINCE WE GOT THIS
SCHEDULED.

SO MY GOAL IS TO HELP, IF I CAN,
MOVE US BEYOND PLANNING OR TO
MATCH THE PLANNING WITH
IMPLEMENTATION, GETTING BEYOND
GUIDANCE TO LEGAL REQUIREMENTS,
AND SIMILARLY WE HEARD A LOT OF
WAYS THAT LARGER COMMERCIAL
DEVELOPMENTS ARE WORKING WITH
THE CITY OR, YOU KNOW, RECEIVING
INPUT FROM THE CITY, BUT ALSO
MOVING US TO RESIDENTIAL AND
SORT OF CITY WIDE SMALL BUSINESS
AND HOMES THAT ARE AFFECTED.
WE HAD ONE BIT OF TESTIMONY
SUBMITTED FROM A RESIDENTIAL
BUILDING THAT THEY SUFFERED --
LET'S SEE -- \$150,000 IN REPAIRS

JUST FOR ONE -- JUST FOR THE
FIRST FLOOD FROM REMEDIATION AND
RESTORATION, REPAINTING,
EMERGENCY RESPONSE, ALL OF IT.
SO IT IS TIME AFTER TIME AFTER
TIME THE COSTS ARE REALLY PILING
UP.

AND THEN FINALLY WANTING TO GET
INTO SOME OF THE QUESTIONS THAT
YOU HAD, SPECIFIC PERMITTING AND
GOVERNMENT FUNDING.

WE WILL MOVE TO THE FIRST ROUND
OF QUESTIONS, FROM AGAIN MY
COLLEAGUE ED FLYNN, DISTRICT 2.
>> THANK YOU VERY MUCH.

I WOULD, I HAVE ONE QUICK
QUESTION.

THE DURING THE RECENT FLOODING
IN JANUARY, MANY VEHICLES HAD A
DIFFICULT TIME GETTING DOWN TO
THE SEAPORT, A LOT OF IT WAS
BLOCKED OFF, BUT IF THERE WAS
SOME TYPE OF MAJOR INCIDENT OR
-- WE NEEDED AN EVACUATION OF
PEOPLE FROM THAT NEIGHBORHOOD,
ARE WE CONSIDERING THAT OPTION?
ARE WE CONSIDERING WHAT COULD
HAPPEN IF WE DON'T HAVE ACCESS
TO THE ROADS FOR EMERGENCY
VEHICLES?

>> WE ARE.

AFTER THE JANUARY 4TH STORM, THE
MAYOR ORGANIZED ALL DEPARTMENTS
TO MEET AND REPORT BACK ON THE
IMPACTS OF FLOODING,, AND LIKE
YOU ACKNOWLEDGED, I WOULD SAY
THE GREATEST IMPACT WAS THE
FLOODING OF THE ROADWAYS AND THE
ABILITY FOR EMERGENCY VEHICLES
TO GET IN AND OUT OF THESE
NEIGHBORHOODS.

SO THAT IS SOMETHING THAT THE
BOSTON AND POLICE FIRE
DEPARTMENT ARE LOOKING AT TO
MAKE SURE THEY HAVE EQUIPMENT
THAT CAN ACTUALLY DRIVE THROUGH
FLOODED STREETS, AND RESPOND TO
EMERGENCY SITUATIONS.

WE HAVE HEARD THE TERM SHELTER
IN PLACE FOR VARIOUS BUILDINGS
BUT WE KNOW --

>> CAN YOU PULL THE MICROPHONE A
LITTLE CLOSER TO YOU.

>>

>> THE BOSTON FIRE DEPARTMENT,
WE HEARD THE TERM SHELTER
PLACE FOR, WHERE BUILDINGS ARE
BEING DESIGNED TO ACCOMMODATE
THE RESIDENTS, WORKERS DURING A
FLOOD EVENT, BUT IF THE
EMERGENCY APPARATUS CAN'T GET TO
THAT BUILDING, THEN THAT KIND OF
UNDERMINES THAT WHOLE SHELTER IN
PLACE SCENARIO.

SO THESE ARE THINGS THAT ARE
UNDER STUDY BY BOSTON FIRE AND
BOSTON POLICE.

>> AND ALSO DO WE HAVE AN
EFFECTIVE WAY TO COMMUNITY WITH
PEOPLE IN THOSE NEIGHBORHOODS
THAT ARE IMPACTED IF THERE WAS
SOME TYPE OF AN EVAC
INVESTIGATION THAT WOULD BE
CALLED?

HOW WOULD WE EVACUATE THEM AND
WHAT TYPE OF COMMUNICATION COULD
WE USE TO REACH THEM?

>> AT THIS POINT, THE CITY SENT
OUT TIPS FOR FLOOD PROOFING AND
FLOOD PROTECTION BEFORE THE
MARCH STORMS, WHERE WE JUST
REMIND PEOPLE HOW TO DETERMINE
IF THEIR PROPERTY IS IN A FLOOD
PLAIN AND HOW TO PROTECT THEIR
PROPERTY FROM A FLOOD.

WHAT WE WOULD LIKE TO DO IS GET
TO THE SAME LEVEL OF PREPARATION
AND AWARENESS OF JUST LIKE A
WINTER STORM.

ARE PEOPLE AWARE OF THE INCHES
OF SNOWFALL BUT NOW THE INCHES
OF FLOODING THAT WOULD OCCUR IN
THEIR NEIGHBORHOOD.

THERE IS A COMPREHENSIVE
EVACUATION PLAN FOR THE CITY OF
BOSTON THAT HASN'T BEEN DIRECTLY
TIED TO THE FLOODING EVENTS.
IT IS OTHER EMERGENCY EVENTS
THAN THE FOCUS OF EVACUATION
PROCEDURES, BUT, AGAIN, THOSE
ARE THINGS THAT ARE UNDER STUDY
BASED UPON THE LAST TWO FLOODING
STORMS TO THE OFFICE OF
ENVIRONMENTAL, EMERGENCY
MANAGEMENT.

>> AND FINAL QUESTION, DOWN AT
THE SEAPORT, THE CITY, STATE AND
FEDERAL PROPERTY DOWN THERE.

WHAT TYPE OF -- HOW IS THE
COMMUNICATION GOING BETWEEN
FEDERAL, STATE AND CITY?
HOW ARE THEY WORKING? ANY
ISSUES THAT YOU HAVE SEEN?
IS EVERYONE PART OF A COMMAND
CENTER WHERE WE CAN CHANGE ..
EXCHANGE INFORMATION EASILY?
>> THAT, I WILL HAVE TO GET BACK
ON YOU FOR THE COORDINATION OF
CURRENT EVENTS, FOR THE SOUTH
BOSTON CLIMATE READY PROCESS.
WE ARE COORDINATING WITH EVERY
LEVEL, INCLUDING THE FEDERAL
GOVERNMENT, THE COURTHOUSE,
SPECIFICALLY.

MASSPORT, MASS DOT, ON HOW THAT
AREA IS VULNERABLE TO FLOODING
AND WHAT COLLECTIVE ACTIONS CAN
BE DONE TO PROTECT THAT AREA.

>> THANK YOU.

>> THANK YOU, COUNCILOR.

>> THANK YOU.

AND BEFORE WE MOVE TO COUNCIL
MAN MCCARTHY, THERE WAS A QUICK
STATEMENT AND THEN --

>> ..

>> THANK YOU TO ALL OF MY
COLLEAGUES AND THANK YOU,
COUNCIL LOHR, COUNCILOR, I GOT
PULLED INTO A MEETING AT THE
STATEHOUSE. SO THANK YOU TO MY
COLLEAGUES.

I JUST HAVE A QUICK STATEMENT
BECAUSE I CAN'T STAY FOR THE
ENTIRE HEARING AND IT IS AN
IMPORTANT ONE SO THANK YOU, FOR
CALLING IT, I COVER DORCHESTER
AND MATTAPAN, BUT DORCHESTER AND
THE CLOSURE BECAUSE OF THE
STORMS, THIS IS AN ISSUE THAT IS
TALKED ABOUT ALL THE TIME ON THE
GROUND AND IN DORCHESTER.

SO I WOULD LIKE TO SEE AND
THROUGH THE CHAIR, THERE WERE
SEVERAL QUESTIONS PROPOSED BY
SEVERAL FOLKS, INCLUDING THE
CONSERVATION LAW CENTER, LAW
FOUNDATION AND MANY OTHERS THAT
WOULD BE REALLY HELPFUL IF WE
GOT SOME RESPONSES TO, AND I
THINK WE CAN SUBMIT THOSE TO YOU
GUYS, TO RESPOND TO US, NOT ONLY
ARE THEY INFORMATIVE TO BRING

BACK TO OUR CONSTITUENTS, BUT LIKE THE CHAIR SAID, THEY OFFERS WAYS IN WHICH FOR US TO ADOPT STANDARDS, CODES, IF WE HAVE TO FOLLOW ORDINANCES TO ADDRESS CERTAIN THINGS, EQUIPPING US WITH THE KNOWLEDGE THAT WE NEED IN ORDER TO DO THAT.

SO WE MOVE A LITTLE PAST THE PLANNING STAGE AND TO ACTUAL ACTION, BUT MOST IMPORTANTLY, TO WAYS IN WHICH TO HOLD OURSELVES ACCOUNTABLE.

SO ANY IDEAS THAT WE HAVE, ANY CODES OR SUGGESTIONS THAT ARE BROUGHT UP IN RESPONSE TO THESE QUESTIONS, ATTACHING TIMELINES TO THESE THINGS IS REALLY IMPORTANT.

I THINK IF WE HAVE LEARNED ANYTHING FROM HOUSTON, IT IS WE HAD A LOT OF RESIDENTS, A LOT OF GREAT IDEAS COME FROM RESIDENTS EARLY ON AND IT WOULD HAVE COST MILLIONS AND THAT WAS, FRANKLY, WHAT TURNED MY ELECTED OFFICIALS AWAY, IF IT IS GOING TO COST MILLIONS.

BUT NOW THEY ARE DEALING WITH ISSUES IN THE BILLIONS.

AND SO HOW CAN WE BE PROACTIVE? I LOOK FORWARD TO BEING A PART OF THIS CONVERSATION, I WANT TO THANK YOU THE COUNSEL MEN FOR, IN THIS REGARD AS WELL, I LOOK FORWARD TO WORKING WITH EACH AND EVERY ONE OF YOU AND THANK YOU AGAIN TO MY COLLEAGUES FOR TAKING ME OUT OF ORDER.

>> THANK YOU, COUNSELOR CAMPBELL AND WE WILL LOOK FOR THE BEST POINT OF CONTACT.

COUNCILMAN MCCARTHY.

>> I FEEL CONFIDENT -- SO THANK YOU FOR BEING HERE.

>> THANK YOU, COUNCILOR MCCARTHY.

THANK YOU, MADAM CHAIR AND THANK YOU FOR YOUR GREAT LEADERSHIP IN CALLING THIS HEARING ON SO MANY ISSUES, LADIES, GENTLEMEN, THANK YOU FOR THOSE WHO HAVE COME TO PARTICIPATE AS WELL.

I THINK THE GOOD THING IS WE ALL

AGREE, WE ALL AGREE THAT CLIMATE CHANGE IS MAN-MADE AND REAL AND IT IS AFFECTING COASTAL CITIES NOW AND I APPRECIATE THE WORK THAT YOU ALL HAVE DONE.

THE ONLY ADVICE THAT I WOULD URGE YOU TO HEED IS TO WORK QUICKLY AND EFFICIENTLY AS POSSIBLE.

AGAIN, I FEEL AS THOUGH I AM PREACHING TO THE CHOIR HERE, BUT WE NO LONG VERY THE LUXURY TO SAY THAT WE NEED TO ACT ON CLIMATE FOR OUR KIDS AND GRANDKIDS' SAKE.

THAT SHIP HAS SAID.

IT IS AFFECTING US NOW.

WE HAVE SEEN IT.

WE SAW IT THROUGH I WILL SAY THREE AND A HALF SINCE THE LAST NOR'EASTER PETERED OUT BY THE TIME IT GOT TO US BUT THREE NOR'EASTERS IN A THREE OR FOUR WEEK PERIOD.

WE SAW THE UNITED STATES HAVE THREE CATEGORY 4 HURRICANES HIT FROM AUGUST TO SEPTEMBER IN A FOUR-WEEK PERIOD.

WE HAVE NEVER HAD MORE THAN ONE HIT THE CONTINENTAL UNITED STATES IN THE SAME YEAR.

AND WE HAVE ALSO BEEN LUCKY IN THIS CITY, DESPITE THE FACT WE ARE A COASTAL CITY, WE HAVE SEEN SOME TERRIBLE FLOODING, BUT, YOU KNOW, HAD SUPER STORM SANDY WHICH WAS SIX YEARS AGO, HAD THAT OCCURRED FIVE OR SIX HOURS EARLIER OR LATER IT WOULD HAVE DEVASTATED SOUTH BOSTON AND THE SOUTH BOSTON WATERFRONT.

SO EVERYTHING WE CAN DO TO ADDRESS THIS PROACTIVELY, WE OUGHT TO BE DOING AND OBVIOUSLY YOU HAVE MY COMMITMENT TO CONTINUE TO PUSH EFFECTIVE AND AGGRESSIVE POLICIES THAT WILL ADDRESS WITH OUR GREENHOUSE GAS EMISSIONS AS A CITY AS WELL AS THE FUNDING THAT IT NEEDS. THIS WILL TAKE MONEY, AND COST MONEY BUT, YOU KNOW, IT WILL PREVENT SIGNIFICANT COSTS LATER DOWN THE ROAD.

SO I HAD A COUPLE OF QUESTIONS
ON -- ON SOME GRANTS THAT CAME
THROUGH THE ENVIRONMENT
SUSTAINABILITY COMMITTEE THAT
ADDRESSED THIS.

ONE WAS ANNOUNCEMENT, I THINK
WHEN YOU FIRST JOINED THE CITY
YOU PARTICIPATED IN ONE SORT OF
GREEN GRAY INFRASTRUCTURE WE DID
LAST YEAR, THIS WAS A STATE
GRANT THAT WOULD ALLOW FOR BOTH
PLANTING OF TREES AND SORT OF
ELEVATED ROADWAYS.

THIS MAY HAVE BEEN WHAT YOU WERE
TALKING ABOUT ON MAIN STREET,
BUT HAS THAT MONEY FROM THE
STATE BEEN ALLOCATED AND SPENT
YET?

>> CAN YOU GET --

>> THIS WAS A PROJECT --

>> I THINK THAT WAS MAYBE BEFORE
I JOINED.

>> YES. THAT MAY HAVE BEEN.

>> I GUESS WE WILL PUT IT THIS
WAY.

HAVE WE DONE ENOUGH WITH THE
STATE FUNDS?

HAVE THERE BEEN ANY -- HAVE WE
BEEN ABLE TO TAKE ADVANTAGE OF
THAT AND OTHER SOURCES OF
REVENUE TO ADDRESS THESE THINGS?
I WILL GET YOU OFF ON -- I DON'T
KNOW OFF THE TOP OF MY HAND THE
0 DOCKET NUMBER ON THIS GREEN
GRAY INFRASTRUCTURE --

>> AND I WILL GET BACK TO YOU ON
THE SPECIFIC DETAILS OF THAT ONE
BUT WE TAKE ADVANTAGE OF A
VARIETY OF FUNDING SOURCES, WHEN
WE ARE LOOKING TO FUND THE
RESILIENCE SOLUTIONS INCLUDING
GRANTS FROM THE BAR FOUNDATION,
FROM THE OFFICE OF MEXICO TALL
MANAGEMENT AND THE STATE HAS
BEEN INTEGRATED IN IF THAT'S
WHAT YOU ARE REFERRING TORCHING
I THINK THAT'S IT, YES.

>> THAT WAS A KEY COMPONENT OF
ONE OF OUR EARLIER REPORTS, AND
THEN OBVIOUSLY THE CAPITAL
BUDGET.

>> AND SO THE OTHER GRANT, I
BELIEVE IN HAS BEEN SOME -- THE
STATE WAS UNABLE TO FULFILL

THEIR COMMITMENT BUT THIS WAS
DONE SEVERAL YEARS AGO WHERE --
AND I WAS VERY EXCITED ABOUT IT
FOR A WHOLE HOST OF REASONS IT
WOULD ALLOW FOR THE CREATION OF
PV PANELS IN BOSTON, INCLUDING
-- JAMAICA PLAN, ALLSTON,
BRIGHTON AND ONE IN DORCHESTER,
THE NAME ESCAPES ME RIGHT NOW
THAT WOULD ALLOW FOR
COMMUNICATION EQUIPMENT TO BE
USED BY PUBLIC SAFETY OFFICIALS
AND FIRST RESPOND IN OTHER WORDS
THE EVENT OF, YOU KNOW, A
MAN-MADE OR WEATHER RELATED
NATURAL DISASTER.

AND I WAS TOLD THAT THAT, ..
WHILE WE ARE SET TO GO NOTHING
IS DONE YET BECAUSE THE STATE
HAS BEEN UNABLE TO SUSTAIN THAT.
IS THERE ANY UPDATE YOU CAN
PROVIDE US WITH THAT?

>> I CAN GET BACK WITH YOU ON
DETAILS ON THAT.

>> YOU ARE NODDING YOUR HEAD.
I THINK YOU MAY HAVE BEEN
INVOLVED WITH THAT AS WELL.

>> OKAY. THAT IS GREAT.
AND THEN WITH -- YOU KNOW, IT
HAS BEEN SOMEWHAT OF A JOKE, BUT
YOU DRIVE AROUND THE CITY AND
YOU SEE THESE BLUE EVACUATION
ROUTE SIGNS AND THEY ARE SORT OF
POINTING TO -- WEST ROXBURY OR
MILTON IF YOU ARE IN DORCHESTER
OR CAMBRIDGE IF YOU ARE
DOWNTOWN. WHAT ARE THOSE?
AND IS THERE A PLAN IN TERMS OF,
YOU KNOW, THE NEED TO DO
EVACUATE THOSE WHO ARE
PARTICULARLY CLOSER TO THE
WATER?

WHAT IS THE PURPOSE OF THOSE
EVACUATION ROUTE BLUE SIGNS?

>> WE WILL HAVE TO DEFER TO THE
OFFICE OF EMERGENCY MANAGEMENT
ON THAT AND HAVE THEM RESPOND
DIRECTLY TO HOW THAT SYSTEM
WORKS.

>> OKAY.

I AM NOT TRYING TO BE ADVERSARY
OR PUT PEOPLE ON THE SPOT BUT I
THINK PART OF THIS CONVERSATION
AS WE CONTINUE, MADAM COMPLAIN,

IS SORT OF INCLUDE EMERGENCY NOT GUILTY OF, BECAUSE THAT IS A KEY PART OF IT.

AND THEN I GUESS FINALLY, WHAT --, YOU KNOW, YOU GAVE OVER SOME, I THINK SOME GOOD CONCRETE STEPS THE CITY IS TAKING.

WHAT -- YOU KNOW, I ASSUME THE EPA AND FEMA ARE IN THIS CURRENT ADMINISTRATION AREN'T SOURCES OF REVENUE OR SUPPORT.

IS THAT A FAIR ASSESSMENT TO MAKE?

I DON'T WANT TO GET TOO POLITICAL BUT MY POINT IS, FEDERAL FUNDS I WOULD ASSUME HAVE DRIED UP IN RELATING TO THIS, TO PREVENTION AND FLOODING AND WEATHER RELATED DEVASTATION; IS THAT CORRECT?

>> SO I BELIEVE THAT THERE ARE SOME FEMA RELATED GRANT OPPORTUNITIES THAT ARE STILL AVAILABLE THAT WE ARE LOOKING AT AS PART OF CLIMATE READY SOUTH BOSTON AND THE OTHER, LIKE NEIGHBORHOOD RESILIENCY SOLUTIONS THAT WE CAN GET YOU THE DETAILS OF.

>> I GUESS MY POINT IS, IS THAT CLEARLY IT IS GOING TO BE UP TO THE CITY AND THE STATE TO DO MORE AND MORE AND MORE, AND THAT IS WHY I HAVE BEEN VERY PROUD TO WORK WITH SO MANY OF MY COLLEAGUES ON WHAT WE HOPE TO GET, AND THAT IS ZERO CARBON, TAKING ADVANTAGE OF THIS BUILDING BOOM IN BOSTON, REALLY INCENTIVIZING LARGER, MEDIUM AND EVEN LARGE SCALE DEVELOPMENTS NOT ONLY TO OFFSET THEIR USE OF POWER AND MAKE THEM MORE ENVIRONMENTALLY SUSTAINABLE AND FRIENDLY BUT ADDRESS THE FACT THAT THEY CAN BUILD SMARTER TO PREVENT FLOODING AND HAVE LONGER SUSTAINABILITY, SO I THINK IT IS A NICE MARRIAGE A OF THE TWO ISSUES AND 0 LOOK FORWARD TO WORKING WITH ALL OF YOU, THEY HAVE BEEN A GREAT PARTNER IN THIS SO I AM GRATEFUL FOR THAT TOO.

>> WELL, WE DO QUALIFY FOR LIKE PREDISASTER MITIGATION FUNDS FROM FEMA, THE FOUR-POINT CHANNEL WOULD QUALIFY FOR THAT BECAUSE IT IS IN AN EXISTING FLOOD PLAIN BECAUSE WE ARE AHEAD OF OTHER CITIES WHERE WE ARE PREDICTING FOR FUTURE FLOOD PLAINS AND THAT IS SOMETHING THAT THE FEDERAL GOVERNMENT DOESN'T RECOGNIZE.

>> YES.

>> IF YOU SEE THE WORK THAT IS OCCURRING IN NEW YORK, NEW ORLEANS, MIAMI, THEY ARE ALL FOCUSED ON THEIR CURRENT FLOOD RISKS.

WE ARE LOOKING BEYOND THAT. SO THAT IS WHERE THERE ARE NO RESOURCES AVAILABLE AND WE HAVE TO BE CAREFUL ABOUT APPLYING FOR LAWYER GRANTS BECAUSE I BELIEVE THEY WOULD NOT FUND ANY ENHANCEMENTS TO AN INFRASTRUCTURE PROJECT IF IT WOULD PROTECT THE CITY FROM A FUTURE FLOOD.

THEY ARE VERY CAREFUL ABOUT HOW THESE THINGS ARE DESIGNED AND TO WHAT ELEVATION.

>> THANK YOU.

>> THANK YOU, COUNCILOR O'MALLEY.

>> THANK YOU VERY MUCH AND I ALSO WANT TO THANK COUNCILOR WU AND NATALIE FOR THIS LEADERSHIP THAT IS NEED.

I HAD THE PLEASURE AND HONEST TO REPRESENT THE DISTRICT WITH THE MOST FLOODING AND WATERFRONT. CHARLESTOWN, EAST BOSTON AND THE NORTH END, AND SO WHAT I WANTED TO DO IS FIRST ASK SOME GENERAL QUESTIONS ABOUT THE ADMINISTRATION AND THEN GET DOWN TO CERTAIN PARTS AND RESPONSES TO WITHIN THE NEIGHBORHOOD. I JUST WANTED TO TOUCH ON SOME GENERAL QUESTIONS.

I UNDERSTAND THE CITY IS EXPLORING THE ZONING OVER LAYS AND I REALLY APPRECIATE YOU BROUGHT THEM UP ALREADY, AND I WAS JUST CURIOUS, IN THAT

CONVERSATION, HOW WE CAN INVOLVE THE BROADER COMMUNITY IN DEVELOPING THOSE STANDARDS.

>> SO WE ARE LOOKING AT OVERLAY DISTRICTS AND GUIDANCE IN THE FUTURE FLOOD PLAIN WE HAVE MAPPED OUT.

THE MAP IS LIVE.

IT IS A REGULATORY DOCUMENT IN THAT IT IS ASSOCIATED WITH THE ARTICLE 37 CHECKLIST, SO ANY PROJECTS CURRENTLY THAT ARE 50,000 SQUARE FEET OR GREATER THAT GO THROUGH THE ARTICLE 80 -- ARTICLE 37 REVIEW HAVE TO RESPOND ON HOW THEIR PROJECT CAN BE PROTECTED FROM THOSE FLOOD ELEVATIONS AT LATER TIMES.

FIRST TO IMPLEMENTATION THE ZONING OVERLAY DISTRICT, WE WOULD HAVE TO GO THROUGH A PUBLIC PROCESS, WHICH INVOLVES ALL OF THE COMMUNITIES THAT WOULD APPLY TO, WHICH IS PRETTY MUCH EVERY NEIGHBORHOOD ALONG BOSTON HARBOR.

SO THERE WOULD BE A SERIES OF PUBLIC CHAIRS THAT WOULD NEED TO BE APPROVED BY THE BOARD AND ZONING COMMISSION.

RIGHT NOW WE ARE JUST LOOKING AT THE STRUCTURE OF HOW THE ZONING OVERLAY DISTRICT OR WHATEVER ZONING MECHANISM, HOW IT WOULD WORK, HOW IT WOULD RESPOND TO THE UNDERLYING ZONING, SO THESE THINGS ARE UNDER INTERNAL DISCUSSION, BUT WILL REQUIRE A PUBLIC PROCESS TO PUT IN PLAY.

>> AGAIN.

I WOULD JUST HE ECHO WHAT COUNCILOR O'MALLEY SAID, I APPRECIATE YOUR LEADERSHIP IN THAT AREA. AND BEFORE I GET AND CONTINUE, I DO KNOW THE AMOUNT OF WORK YOU HAVE PUT THIS IN TERMS OF CLIMATE READY BOSTON AND I WANTED TO ACKNOWLEDGE THAT, AND TO THANK YOU FOR THAT WORK AND IN HELPING US TO GET AS PREPARED AS POSSIBLE ..

>> I HAD ANOTHER QUESTION.

I BELIEVE COUNCILOR FLYNN TALKED ABOUT THE COMMUNICATION BETWEEN

THE CITY AND THE FEDERAL
GOVERNMENT.

I UNDERSTAND FEMA OPERATES A
VOLUNTARY PROGRAM THAT ALLOWS
COMMUNITY TO EARN CREDITS FOR
RESILIENCY MEASURES AND REDUCED
INSURANCE PREMIUMS FOR
RESIDENTS.

AND SO CAMBRIDGE AND QUINCY, I
BELIEVE, PARTICIPATE IN THIS
PROGRAM, BOSTON AS OF TODAY DOES
NOT AND I WOULD BE -- I WOULD
LOVE FOR US TO ONE DAY, DOES
BOSTON INTEND TO BE A PART OF
THAT?

IS THERE A PROCESS STARTING?
>> YES.

THAT IS A GOAL WE ARE PURSUING,
IT IS A GOAL THAT WAS OUTLINE AS
PART OF THE CLIMATE READY BOSTON
STRATEGY.

THE FIRST STEPS OF THAT PROCESS
INVOLVE A SITE VISIT FROM FEMA
AND THEY ARE UNDERSTANDABLY
Distracted, I WILL SAY, WITH
HIGH PRIORITIES IN OTHER AREAS,
SO WE ARE EAGERLY AWAITING THAT
VISIT.

>> THANK YOU.

>> SO YOU WILL LET US KNOW WHEN
THEY COME IN.

>> ABSOLUTELY.

>> BUT YOU AGREE TO THE GOAL,
THEN OF US BEING ABLE TO TO BE A
COMMUNITY TO BE INVOLVED IN THE
COMMUNITY RATING SYSTEM.

>> UH-HUH.

>> TO HELP US SAY MONEY ON
INSURANCE PROGRAM --

>> OKAY.

GREAT. SO YOU HAD MENTIONED OR
I THINK COUNCILOR O'MALLEY
TOUCHED ON THE FACT THAT THERE
HAVE BEEN A RETREAT OR
ADVOCATION OF THE ROLE OF
FEDERAL GOVERNMENT IN HELPING
CITIES OR OUR WATER FRONDS
FRONTS AND I WAS JUST CURIOUS IF
YOU BALLPARK WHAT YOU THINK THE
CITY OF BOSTON NEEDS IN ITS
PUNISHMENT TO PREPARE FOR
FLUIDING -- FLOODING.

>> ..

>> COULD YOU BE A LITTLE MORE

SPECIFIC.

WHAT FLOODING -- BY WHEN?

>> IN ORDER TO BE AND KEEP IN SCHEDULE WITH YOUR BOSTON CLIMATE READY SCHEDULE THIS YEAR.

>> OR ADD TO THAT, WITH THE FLOODING THAT HAS HAPPENED SO FAR, IN ORDER TO PREVENT THE LEVEL OF FLOODING WE HAD THIS YEAR.

WHAT DO YOU THINK WE WOULD NEED IN TERMS OF THE BUDGET?

>> SO I DON'T HAVE A SPECIFIC MUST BE FOR YOU.

I CAN REFER YOU GO THE CLIMATE READY EAST BOSTON AND CHARLESTOWN REPORT, WHICH IS OUR FIRST ASSESSMENT.

THAT REPORT LAYS OUT ESTIMATED COSTS AND PRIORITIES BY WHAT ACTIONS NEED TO BE TAKEN BY WHAT TIME TO SHOW WHAT LEVEL OF PROTECTION, FOR THOSE INITIAL PATHWAYS -- PATHWAYS AND NEIGHBORHOODS AND WE ARE UNDER THE PROCESS WITH THE SOUTH BOSTON AND SEAPORT REPORT THAT IS LIKELY TO BE A HIGHER LEVEL OF MONEY NEEDED OVER THE LONG-TERM FROM INITIAL ESTIMATES, AND WE ARE PURSUING THEM IN DOWNTOWN NORTH END AND IN SERIES.

SO ONCE WE HAVE ALL OF THOSE NUMBERS, I CAN GIVE YOU A GOOD NUMBER, BUT --

>> WE WILL BE OUT OF BUDGET SEASON THEN.

>> EXACTLY.

>> OKAY.

WELL, THANK YOU. I WILL DEFINITELY LOOK AT THOSE REPORTS.

THAT WILL HELP GUIDE AT LEAST PART OF THE DISTRICT.

SO I THINK YOU MENTIONED IT ACTUALLY, THE GREENWAY BUSINESS DISTRICT HAS ACTUALLY FORMED KIND OF A SUPPORT, TO SUPPORT CONTINUED STEWARDSHIP IN THE AREA AND I WAS CURIOUS, HAVING THE WATERFRONT AREA, COULD WE USE A SIMILAR STRUCTURE TO

SUPPORT RESILIENCY ON THE WATER FRONT?

>> THOSE ARE MODELS THAT, INCLUDING MODELINGS WE ARE LOOKING AT, KNOWS ARE MODELS WE ARE LOOKING AT BUT IT MAY BE MORE OF A GOVERNMENT RESPONSIBILITY, SINCE IT IS GOING TO REQUIRE SIGNIFICANT CAPITAL INVESTMENTS, THEY MAY REQUIRE FEDERAL OR STATE GRANTS AND LONG-TERM MAINTENANCE, BUT POOLING FUNDS THROUGH A BIG DISTRICT IS ONE EXAMPLE THAT WE ARE LOOKING AT ON HOW TO KIND OF IMPLEMENT THESE FLOOD MECHANISMS IN THE NEIGHBORHOODS.

>> I DON'T KNOW, I WAS JUST CURIOUS -- AND THANK YOU. I THINK THAT MAKES SENSE. WE ARE GOING HAVE TO LOOK THAT DIFFERENT POOLS OF MONEY BUT I APPRECIATE YOUR COMMENT THAT WE DON'T WANT TO MAKE THE BURDEN BE ON PRIVATE CITIZENS TO HELP PREPARE THE CITY OF BOSTON. I AGREE WITH THAT.

SO JUST IN TERMS OF UPCOMING LEGISLATION FOR THE ADMINISTRATION, DOES THE ADMINISTRATION ANTICIPATE FILING ANY FLOOD PROTECTION OR ANY LEGISLATION?

>> REGARDING THAT?

>> I THINK WE ARE STILL IN THE DISCOVERY MODE, WHERE WE ARE TRYING TO UNDERSTAND THE VULNERABILITIES OF OUR NEIGHBORHOODS, WHAT THESE MECHANISMS OR STRUCTURES ARE PHYSICALLY, HOW DO WE SECURE THE RIGHT-OF-WAY?

THAT MAY REQUIRE LEGISLATION, HOW DO WE FUND PUBLIC INVESTMENT OF PRIVATE PROPERTY IS ANOTHER THING THAT MAY REQUIRE LEGISLATION, WE ARE NOT AT THAT POINT WHERE WE FLAG SPECIFIC SOLUTIONS, BUT EVERY -- I THINK EVERY LAYER WE HAVE DONE, EAST BOSTON, CHARLESTOWN PICKED UP CHALLENGES AND MORE SO IN SOUTH BOSTON, PARTICULARLY WITH GOVERNANCE AND FUNDING, BUT

THESE ARE ALL THINGS THAT ARE UNDER STUDY AND WE WILL BE REPORTING OUT PROBABLY IN MAY. WITH --.

I THINK LATER THIS CAREER WE WILL EXPECT TO HAVE THAT REPORT OUT AND AS RICH SAYS, AS WE START TO UNDERSTAND AND DEVELOP NOT JUST ONE RESILIENCE REPORT BUT MULTIPLES, WE CAN START TO SEE THE SCALE ACROSS THE CITY AND THEN WE ARE IN A PERIOD WHERE WE CAN UNDERSTAND WHAT SORTS OF LEGISLATION OR OTHER APPROACHES ARE NECESSARY TO TACKLE THOSE CHALLENGES.

THANK YOU.

AND THEN JUST A COUPLE MORE. SORRY.

>> IN 2013, THE CITY OF BOSTON CONSIDERED CREATING A LOCAL WETLAND ORDINANCE.

UNDER THE WETLANDS PROTECTION ACT. THE CONSERVATION COMMISSION ACTUALLY HELD A NUMBER OF LISTENING SESSIONS ABOUT THIS AND I WAS JUST CURIOUS, DO YOU HAVE ANY SENSE OF WHERE -- WHERE THOSE CONVERSATIONS LANDED, WHETHER IN THIS IS A TOOL WE ARE GOING TO EXPLORE?

HAVE YOU GIVEN -- HAS THE ADMINISTRATION DECIDED TO ABANDON THAT EFFORT?

>> IT IS A THING THAT WE CONTINUE TO EXPLORE AND REVIEW AND IT IS UNDER ACTIVE CONSIDERATION.

>> I JUST HAVE ONE MORE AND THEN I WILL WAIT FOR THE SECOND ROUND.

>> ADMINISTRATION HAVE A PHYSICIAN ON STATE POLICY CURRENTLY PENDING IN THE STATEHOUSE, SUCH AS LEGISLATION TO FORM CLIMATE ADAPTATION AND -- OR THE GOVERNMENT'S ENVIRONMENTS TALL BOND BILL ENVIRONMENTAL BOND BILL?

..

>> IT IS A THING THAT WE ARE AGAIN DISCUSSING WITH OUR PARTNERS AT THE STATE AND WE ARE

VERY INTERESTED IN THE DIRECTION
IT IS GOING.

>> THANK YOU.

>> OKAY.

>> SO LET ME JUST HAND IT BACK.
AND I KNOW YOU WANT TO GET TO
THE PANEL OF PUBLIC TESTIMONY.
SO JUST FOLLOWING THIS LINE OF
QUESTIONING, THE BPDA HAS A
RESILIENCY CHECKLIST THAT IS
GUIDANCE, YOU REFERRED TO THAT.
HOW MUCH OF THAT IS MANDATORY OR
COULD BE MADE MANDATORY PRETTY
IMMEDIATELY?

[SILL YEN SITUATE]

>> RIGHT NOW THE CHECKLIST
PROJECTS HAVE TO DEMONSTRATION
ALL OF THEIR THINKING ABOUT
CLIMATE CHANGE RESILIENCE TO SEA
LEVEL RISE AND FUTURE SEA LEVEL
RISE.

IT IS REVIEWED BY INTERAGENCY
GREEN BUILDING COMMITTEE MADE UP
OF THE ENVIRONMENTAL DEPARTMENT,
ISD AND THE BPDA, THE PROJECTS
CAN'T RECEIVE BUILDING PERMITS
UNTIL THEY HAVE SATISFACTORILY
COMPLETED THE DOCUMENT AND
RESPONDED TO INPUT.

WE SEE -- RIGHT NOW, WE ARE
PUSHING THE PRIVATE SECTOR TO
THINK ABOUT ENGINEERING AND
DESIGN SOLUTIONS TO RESPOND TO
CLIMATE CHANGE AND FUTURE
PROJECTIONS.

WE ARE GATHERING RECOMMENDATIONS
AND WAYS IN WHICH TO IMPLEMENT
THESE THINGS WHICH WILL
EVENTUALLY BECOME REQUIREMENTS.
RIGHT NOW IT IS MORE OF
UNDERSTANDING WHAT IS OUT THERE
FOR OPPORTUNITIES TO CREATE
BETTER DEVELOPMENTS, BUT WE ARE
PICKING UP THESE IDEAS, THAT
WILL EVENTUALLY BECOME PART OF A
ZONING REQUIREMENT, PERHAPS
BUILDING CODE OR THROUGH ZONING.

>> SO RIGHT NOW, THEY ARE JUST
REQUIRED TO GIVE AN ANSWER,
ABOUT HOW MUCH ARE THEY SENT
BACK TO REVISE THAT TO MEET A
CERTAIN STANDARD?

>> I THINK IT IS

I HAVE A COUPLE MORE QUESTIONS.
AS ADDITIONAL BUILDINGS ARE
ADDING -- NEW BUILDINGS ARE
BEING BUILT AND I GUESS WE ARE
HAVING ONE STANDARD FOR LEAD,
SOME OF THEM ARE, A MAJORITY OF
ARE STILL ADDING TO THE CARBON
FOOTPRINT AND JUST CURIOUS, WITH
OUR GOAL TOWARDS BEING CARBON
FREE, HOW ARE YOU COMPENSATING
WHEN A NEW DEVELOPMENT IS ADDING
TO THE CARBON FOOTPRINT WHERE
ARE YOU COMPENSATING IT SOME
PLACE ELSE?

>> SO AS YOU MENTIONED, WE HAVE
A CARBON NEUTRALITY GOAL IN THE
CITY AND OUR CURRENT PROCESS IS
CALLED CARBON FREE BOSTON, THAT
IS A PROJECT TO ANALYZE, TO THE
GREENHOUSE GAS REDUCTIONS,
POTENTIAL COST AND BENEFITS OF
POLICIES THAT COULD TAKE US TO
CARBON NEUTRALITY, NEW BUILDINGS
ARE A KEY SEGMENT OF OUR
EMISSIONS AND THEY ARE BEING
ACTIVELY ANALYZED IN THAT
PROCESS.

SECONDARILY, I WOULD -- IF YOU
WANT TO TALK ABOUT THE CLIMATE
CHANGE CHECKLIST?

>> WE ALSO HAVE IN THE REVISED
CLIMATE CHANGE CHECKLIST, WE
HAVE A NEW COMPONENT TO THE
CHECKLIST WHICH ASKS NEW
BUILDINGS TO IDENTIFY HOW THEY
PLAN TO CONTRIBUTE TO OUR CARBON
REDUCTION AND NEUTRALITY GOALS.

>> THANK YOU.

AND THEN I AM GLAD YOU AGREE
THAT, YOU KNOW, CLIMATE CHANGE
IS A MAN-MADE ISSUE, AND THAT WE
ALL HAVE A PART TO PLAY IN
MAKING SURE THAT WE ARE REDUCING
CLIMATE CHANGE.

SO I AM CURIOUS IN TERMS OF, I
GUESS I AM CONFUSED OFTENTIMES
BY THE CITY'S POLICY OF PO
CONTINUING TO SUPPORT OR GREEN
LIGHT NATURAL GAS PROJECTS, AND
WHY WE ARE MOVING IN THAT
DIRECTION OR STILL ALLOWING THAT
TO HAPPEN WHEN I FEEL RESILIENCY
WOULD PUSH US TO ELECTRICAL
ENGINEER FULLER IN OUR

INFRASTRUCTURE, SO WHY ARE WE
PUSHING PROPER FOR FOSSIL FUELS
AT ALL?

>> SO WHEN I TALK ABOUT OUR
CARBON FREE BOSTON PROJECT, WE
ARE EVALUATING ALL OPTIONS THAT
GET US TO CARBON NEUTRAL AT
THIS, INCLUDING TRANSITION -- SO
WE HAVE TO TAKE INTO ACCOUNT
TRANSITION TIME, PATHWAYS AND
COSTS. WE NEED GET THERE BUT WE
NEED TO GET THERE IN A
COST-EFFECTIVE AND EFFICIENT WAY
SO IT BALANCES THE CITY OF
BOSTON'S GOALS.

LIKE WE CAN'T PICK A SOLUTION
FIRST WITHOUT KNOWING ALL OF THE
BASELINE INFORMATION AND SECOND
WITHOUT UNDERSTANDING WHAT THE
COST, REAL COSTS AND BENEFITS OF
THAT ACTION ARE.

>> AND EXCITELY AGREE WITH THAT
ANALYSIS.

I THINK IT IS EXTREMELY
IMPORTANT AND I APPRECIATE THE
PRESSURE THAT YOU ARE UNDER AND
IN TERMS OF LOOKING AT THIS, BUT
AGAIN THIS IS ABOUT NEW
INFRASTRUCTURE THAT WE ARE
CREATING THAT IS FOSSIL FUEL
DEPENDENT AND I THINK THAT IS
WHERE WHEN WE HAVE A GOAL OF
BEING CLIMATE -- CARBON FREE AND
THEN ALSO SUPPORTING, AGAIN, NEW
INFRASTRUCTURE FOR FOSSIL FUELS,
THAT'S WHERE THE CITY SEEMS TO
BE -- WELL, I AM DEFINITELY
CONFUSED ABOUT THE CITY'S
POSITION OR HOW IT IS GOING TO
GET THERE.

>> OUR POSITION IS THAT, YES --
NO.

I UNDERSTAND YOUR QUESTION.
OUR POSITION IS THAT WE WANT TO
HAVE ALL OF THE BEST INFORMATION
AVAILABLE BEFORE WE MAKE VERY
IMPACTFUL DECISION FORCE THE
CITY, AND SO WHEN WE HAVE THAT,
WHEN WE HAVE THAT CORRECT,
INDEPENDENTLY VERIFIED
INFORMATION THAT WE CAN ALL WORK
THERE, WE COME TOGETHER AS PART
OF OUR PLANNING PROCESS AND
BEGIN TO MAKE THOSE CHOICES.

>> AND JUST SPECIFICALLY ABOUT THE DISTRICT, RICHARD MENTIONED A SUBSTATION IN SOUTH BOSTON.

>> YES.

>> YES.

AND SO AS YOU KNOW, THE SUBSTATION PROJECT PROPOSED IN EAST BOSTON, AND YOU SPECIFICALLY LAID OUT WAYS IN WHICH THAT SUBSTATION DESIGN WAS BECOMING OR AT LEAST CLIMATE READY.

COULD YOU WALK ME THROUGH THAT AGAIN?

>> SO IT IS A SUBSTATION IN THE FLYNN MARINE PARK THAT EVER SOURCE COMPLETED, I BELIEVE TWO YEARS AGO, IT IS ELEVATED 15 FEET.

IT IS ON PILINGS THAT WOULD WITHSTAND WAVE ACTION AND VELOCITY, I THINK THE SUBSTATION YOU ARE REFERENCING IN EAST BOSTON IS THE ONE ON CONDOR STREET, WE WOULD HAVE TO DO THE SAME THING, WHERE IT IS ELEVATED AND PROTECT GRAD THE FLOOD PLAIN, PROTECTED FROM THE FLOOD PLAIN BUT ALSO PROMISED FLOOD PLAIN .. NOT JUST, YOU KNOW, THE FLOODING RISKS THAT ARE ALONG THE CHELSEA CREEK AT THE MOMENT. BUT THOSE ARE THINGS THAT INFRASTRUCTURE CAN DO, INCLUDING SIGNIFICANT ELEVATION AND ALSO ARMORING THE FOOT THINGS TO BE PROTECTED BY DEBRIS, BUT ALSO WAVE ACTION.

>> IS THERE ANY MOVEMENT IN THE ADMINISTRATION TO NOT ONLY, YOU KNOW, AS WE ARE SEEING THE SUBSTATIONS ARE COMING BUT HOW WE ARE MONITORING THE USE THAT THEY ARE TRYING TO MEET AND IF THERE IS ANY REDUCTION IN THE USE THEY ARE TRYING TO MEET? IS THE CITY ASKING THEM TO COME BACK TO THE TABLE ABOUT WHETHER WE CONTINUE TO NEED THE SUBSTATION?

IS THERE ANY MOVEMENT IN THE ADMINISTRATION TO ASK ABOUT OTHER WAYS OF THE COLLECTING ENERGY, SOLAR ENERGY THAT WOULD

HELP MEET THE NEEDS OF
NEIGHBORHOODS?
IS THERE ANY CONVERSATION ABOUT
THAT?
>>
>> SO WE ALWAYS HAVE ACTIVE AND
ONGOING CONVERSATIONS ABOUT
SOURCING MORE OF OUR ENERGY FROM
RENEWABLE SOURCES AND PROMOTING
RESILIENCY WITH THE GRID AND
OTHER INCIDENTS.
THERE ARE A NUMBER OF ACTIVITIES
THAT ARE OUTGOING IN THAT
DIRECTION.
>> AND TO YOUR COMMENT ABOUT,
AGAIN, THE AGENCIES WORKING
TOGETHER, WE HAD FLOODING IN
CHARLESTOWN THAT WAS ACTUALLY
PRETTY FAR AWAY FROM THE
WATERWAY BUT BUILT ON AN OLD
RIVER THAT HAS BEEN FILLED IN,
AND ONE OF THE HARDEST THINGS
WAS TRYING TO NAVIGATE FOLKS IN
CHARLESTOWN BETWEEN THE CITIES
AND THE BOSTON WATER AND SEWER,
BECAUSE THEY HAD SEWAGE BACK
INTO THEIR HOMES, AND SO THAT
CONVERSATION RESULTED IN THE
BASICALLY EVERYONE SAYING, THERE
IS NOTHING WE CAN DO, AND I
WOULD REALLY LOVE TO CONTINUE TO
TALK WITH THE CITY ABOUT THAT
CONVERSATION, WITH BOSTON WATER
AND SEWAGE ABOUT HOW WHEN THERE
IS A PACKAGE OF SEWAGE INTO
SOMEONE'S HOME DUE TO FLOODING
HOW THE CITY COULD BE HOLDING
OTHER -- OR PARTNERING WITH THEM
TO MAKE SURE THAT FOLKS AREN'T
JUST LEFT WITH SUCH SEWAGE.
>> WE CAN FOLLOW ONE BOSTON
WATER AND SEWER ON THAT ISSUE.
SO --
>> DEFINITELY, YES.
>> STATING IT WASN'T IN THEIR
JURISDICTION.
>> IT WASN'T IN THEIR
JURISDICTION AND SO THEY WERE IN
AND OUT OF THE FOOD PLAIN.
THERE WAS AN ISSUE OF WHETHER
THEY HAD THE INSURANCE.
THEY DIDN'T. AND IT WAS A
HORRIBLE POSITION TO BE IN TO
HAVE THAT IN YOUR BASEMENT.

>> YES.
>> IF YOU PROVIDE US MORE INFORMATION --
>> ABSOLUTELY.
>> WE CAN LOOK INTO IT.
AND SPEAKING OF WHICH LOOKING INTO IT, I KNOW THERE WERE SEVERAL PHOTOS OF FLOODING IN THE NORTH END THAT WERE SENT IN CHARLESTOWN NAVY YARD, AND JUST TELL ME IN THAT PROCESS, WHEN WE DO GIVE YOU THAT INFORMATION ABOUT, YOU KNOW, WHERE THE FLOODING HAPPENED AND THESE ARE THE PICTURES AND THIS IS WHAT HAPPENED, WHAT DOES THE CITY DO?
>> WE HAVE MAPPED OUT THE AREAS THAT HAVE FLOODED.
WE ARE OVERLAYING IT.
THERE IS THERE IS -- WITHIN THE FLOOD PLAIN, SO THE BUILDINGS THAT HAVE BEEN IMPACTED QUALIFY FOR FLOOD INSURANCE BUT ALSO ASSISTANCE, BUT WE ARE REALLY JUST UNDERSTANDING WHERE THE FLOODING OCCURRED AND WHAT THE IMPACT WAS, YOU KNOW, DID IT GET BEYOND THE FLOODED ELEVATION OF THE BUILDING?
SO WE HAVE ASKED THE NEIGHBORHOOD GROUPS TO PROVIDE US THESE DETAILS AS WE JUST CHRONICLE THE IMPACTS AND THE NEXT LEVEL OF RESPONSE.
>> MY FINAL QUESTION IS ABOUT, AGAIN, EAST BOSTON, AND I REALLY APPRECIATE YOU BRINGING UP SUFFOLKS DOWNS IN YOUR DEVELOPMENT AND YOU MENTIONED SEVERAL WAYS IN WHICH .. THEY ARE ALREADY PLANNING FOR, TO BE CLIMATE READY OR WHETHER JUST TO BE FLOOD READY?
>> THEY ARE PROPOSING AN ELEVATION OF AT LEAST 40 INCHES SO THEY ARE NOT IN A CURRENT FLOOD PLAIN WHERE THE BUILDINGS ARE PROPOSED BUT ADDRESS THE FUTURE FLOODING RISKS, SO ELEVATING THE ENTIRE PROFILE OF THAT DEVELOPMENT SITE BY 40 INCHES TO BE PROTECTED BUT ALSO PUSHING THEM TO LOOK AT OUR, ON-SITE MITIGATION EFFORTS

THAT NOT ONLY PROTECT THEIR PROJECT BUT THE NEIGHBORHOOD. THEY ARE RELYING ON THE BLUE LINE FOR, YOU KNOW, A BIG MODE OF THEIR TRANSPORTATION AND IF THAT BLUE LINE STATION AND AREA OF -- IS VULNERABLE NOW FLOODING SO IT IS POSSIBLE THAT IS PART OF THEIR REQUIREMENT FOR AN OFF SITE SOLUTION IS TO ASSIST WITH ELEVATING THE RAIL BETTER OR MAKING IMPROVEMENTS TO THE TRANSPORTATION INFRASTRUCTURE, NOT JUST FOR THEIR SITE BUT FOR THE NEIGHBORHOOD.

>> AND ALSO I THINK THIS IS A WONDERFUL OPPORTUNITY FOR THE CITY TO TAKE LEADERSHIP AS WE ARE BUILDING BRAND-NEW SECTION OF THE NEIGHBORHOOD, TO REALLY IMPLEMENT THE ZERO STANDARDS FROM THE GROUND UP IN AND THE CONSTRUCTION MATERIALS THAT WE USE TO REALLY LOOK AT, AS COUNCILOR WAS ALLUDING TO OUR STANDARDS AND ACTUALLY ENFORCE, HOW WE CAN ACTUALLY ENFORCE STANDARDS ON THE DEVELOPMENT AS WELL.

I COULDN'T THINK OF A BETTER OPPORTUNITY.

>> THANK YOU.

>> THANK YOU, COUNCILOR EDWARDS.

>> COUNCILOR O'MALLEY YOU HAD A COUNSEL OF FOLLOWUPS?

>> YES.

THANK YOU AGAIN.

THE POINT THAT COUNCILOR WAS AND YOU JUST ECHOED WHICH I APPRECIATE THE POINT ABOUT BALANCING THE AFFORDABILITY ASPECT WHICH IS CRUCIAL WITH STANDARDS THAT WILL SAVE -- COULD POTENTIALLY SAVE HOUSES. I WOULD URGE YOU TO STUDY WHAT HAS BEEN HAPPENING IN PENNSYLVANIA WHERE THEY HAVE ACTUALLY BEEN ABLE TO USE A MODEL WITH BUILDING AFFORDABLE HOUSING AND AFFORDABLE HOMES AND IT HAS BEEN TREMENDOUSLY SUCCESSFUL.

AND I WILL SAY THE SAME THING HERE.

I WOULD SAY EVERY FISCAL
CONSERVATIVE OUGHT TO BE A
ENVIRONMENT BECAUSE IT IS SO
MUCH CHEAPER TO RUN A HOUSE THAT
IS BUILT WELL.

TWO MORE QUESTIONS ON TODAY'S
TOPIC.

HAVE ANY OF YOU STUDIES WHAT
THEY ARE DOING IN CHINA AS IT
RELATES TO SO-CALLED SPONGE
CITIES?

>> ARE YOU FAMILIAR WITH THE
TERM.

>> WE ARE.

WE ARE ACTUALLY LOOKING AT THOSE
OPPORTUNITIES FROM -- CORNER.

SO WE ARE DOING A PLANNING
PROCESS FOR -- CORNER WHICH IS
NOT AT RISK FOR COASTAL FLOODING
BUT IT IS A BASIN.

>> YES.

>> THAT FLOODS.

SO WE ARE LOOKING AT WAYS TO
BUILD OUT THAT NEIGHBORHOOD,
WHERE IT CAN ABSORB THE STORM
WATER AND NOT DEFLECT IT TO
OTHER NEIGHBORHOODS
WATER AND NOT REFLECT IT TO
OTHER NEIGHBORHOODS.

WE'RE FAMILIAR --

>> YEAH.

FOR THOSE THAT -- BASICALLY AS
IT SOUNDS, A POROUS FOUNDATION
THAT COULD TAKE UP 70 OR 80% OF
THE RAIN THAT FALLS.

SOUNDS LIKE INNOVATIVE THINGS
THAT ARE HAPPENING IS.

IS THERE A STATE OR CITY THAT
HAS SET THE GOLD STANDARD ON
ADDRESSING SORT OF THESE THINGS?
THAT WE'VE STUDIED OR YOU ALL
HAVE STUDIED?

>> THOSE EXAMPLES IN CHINA WHERE
THEY HAVE GROWTH AND DENSITY ARE
GOOD EXAMPLES.

THEY ALSO HAVE A LOT OF RAVINE
FLOODING.

AT CLOVUS CORNER, WE'RE LOOKING
AT BASINS AND HARD TANKS AND
OTHER THINGS THAT CAN BE PUT
UNDERGROUND THAT CAN HOLD THE
WATER IN EXTREME PRECIPITATION.

>> AND I APOLOGIZE IF WE WENT
OVER THERE.

WAS THERE ANY TALK ABOUT A SPEED
BARRIER ARC IN BOSTON HARBOR?
>> THERE IS A STUDY AND WE
EXPECT THE REPORT IN THE NEAR
FUTURE.

>> DO YOU HAVE ANY IDEA WHAT THE
COST WOULD BE FOR SOMETHING LIKE
THAT?

SUBSTANTIAL I WOULD

>> SUBSTANTIAL.

YEAH.

>> FANTASTIC.

I'LL END IT WITH THAT, MADAM
CHAIR.

>> I WANT TO THANK COUNCILLOR
ESSAIBI-GEORGE.

THANKS TO OUR PANELISTS.

I'M GOING TO TAKE A FEW MINUTES
OF PUBLIC TESTIMONY BEFORE WE
MOVE TO THE SECOND PANEL.

SO THE PANELISTS -- SORRY.

THE RESIDENTS AND GUESTS THAT
COULD MAKE YOUR WAY DOWN TO
TESTIFY.

I'LL NAME A COUPLE.

YOU CAN GATHER EITHER ONE OF
THESE PUBLIC MICROPHONES.

STEVE HOLLINGS, IVY ST. JOHN,
JILL HORWOOD AND AMBER

KRISTOFFERSON.

OKAY.

PERFECT.

COULD YOU INTRODUCE YOURSELF AND
YOUR ADDRESS FOR THE RECORD?

WE'LL ASK EVERYONE TO KEEP TO
TWO MINUTES.

>> I'VE STEVE.

I'M A 27-YEAR RESIDENT OF THE
FOURTH POINT NEIGHBORHOOD, SOUTH
BOSTON.

THANK YOU FOR HAVING ME.

MY TESTIMONY SHOULD BE TWO
MINUTES AND 15 SECONDS.

I TIMED.

I WANT THE SAY, NEW CONSTRUCTION
IS PUSHING FLOOD WATER FROM ONE
RESIDENT TO ANOTHER.

YOU CAN'T PUT A BUILDING ON A
MOUNTAIN.

THE FLOOD WATER AND STORM WATER
GO TO EXISTING BUILDINGS.

YOU NEED TO UNDERSTAND I'M --
IMPERMEABLE WATERS.

SOME OF THOSE ARE SOLVED WITHOUT

A LOT OF MONEY BUT REQUIRE A LOT OF WILL.

SO JUST SAYING YOU'RE GOING TO PUT THINGS ON A MOUNTAIN IS NOT GOING TO SOLVE ANYTHING FOR THE HOME OWNERS.

LET ME RUN THROUGH MY TESTIFY QUICKLY.

IN -- THIS IS ONE ANECDOTE. IN 2004, THE EPA PUBLISHED A STUDY.

THE MASTER PLANNED AED 1.4 MILLION SQUARE FEET OF NEW BUILDING MASSING TO THE ALREADY APPROVED 6.3 MILLION SQUARE FEET OF COMMERCIAL PROJECTS.

WITH THE AMENDMENT, THERE WAS A 1.6 ACRE PATH AND CENTRAL COURT YARD.

HARBOR WAY REPLACED A ONE-ACRE PARK.

IT WAS APPROVED IN 2010 MASTER PLAN.

HARBOR WAY IS DESIGNED TO BE 85% HARDSCAPE, 15% GRASS.

HARBOR WAY IS ONE EXAMPLE OF ESCAPES TO BE APPROVED.

DURING THE APPROVAL OF AN AMENDMENT TO MULTI-ACRE MASTER PLANS.

FLOOD WATERS ON NEWLY CONSTRUCTED PRIVATE STREETS AND OTHER IMPERMEABLE SURFACES WILL IMPACT THE OLDER BUILDINGS. THIS MAY BE ONE OF THE LOST NEIGHBORHOODS TO SEA LEVEL RISE AS A RESULT OF LARGE MASTER PLANS IN THE GEOGRAPHICAL AREA. MUCH OF FLOODING IN FOUR POINTS IS NOT ARRIVING FROM WATER BREACHING THE CHANNEL SEA WALL. THE FLOOD WATERS ARE FROM PUBLICLY AND PRIVATELY OWNED. THAT TOTAL WATER INCLUDES SEA WATER, CURRENTLY FROM STORM SURGE AND STORM WATER RUN-OFF UNABLE TO DRAIN.

NO PLANS FOR ADDRESSING BACK FLOW FROM WITHIN 139 PUBLIC AND PRIVATE OUTFALLS HAVE BEEN PRESENTED HAVE A LONG-TERM OR REACTION OPTION AS OF MARCH 2018.

I WOULD SUGGEST TO PRIORITIZE

NEW CONSTRUCTION.
LOOK AT EXISTING COMMUNITIES,
RESIDENTS AND PLAN ACCORDINGLY.
THANKS FOR YOUR TIME.
I HAVE A COPY OF THE TESTIMONY
FOR YOU.
THANK YOU.
>> THANK YOU, STEVE.
IVY?
COUNCILLOR O'MALLEY AND FLYNN,
EDWARDS AND McCARTHY, I'LL
E-MAIL YOU WHAT I'M SAYING HERE.
THANK YOU FOR THIS OPPORTUNITY
TO ADDRESS YOU AGAIN.
SPEAKING FOR THE 500 PLUS FOLKS
THAT ARE LOOKING FOR A CHANCE TO
COMPARE BOSTON TRANSPORTATION
DEPARTMENT'S DESIGN TO THE
NORTHEASTERN PETER FIRST DESIGN
FOR THE RUTHERFORD AVENUE
CORRIDOR.
THE CITY'S DESIGN FEATURES A
REBUILD OF THE 200 FASTEST
CURRENTLY IN PLACE IN
CHARLESTON.
THE CURRENT UNDERPASS AT
SULLIVAN SQUARE IS FRAUGHT WITH
REGULARITY.
WITH RISING SEA LEVELS, THE
UNDERPASS WILL BE AT RISK, TOO.
THE AVENUE AS COUNCILLOR EDWARDS
POINTED OUT IS OPEN FILL LAND
OVER THE OLD MIDDLE RIVER AND
THE MIDDLESEX CANAL.
AS YOU'RE AWARE, THE RCIC HAS
SUPPORTED THE DESIGN FOR MOVING
THE VOLUME OF TRAFFIC NOW AND
EXPECTED IN THE FUTURE.
WE HAVE DONE SO IN PART BECAUSE
UNDERPASSES ARE EXPANSIVE TO
BUILD.
HOWEVER, WE UNDERSTAND -- WAIT A
MINUTE.
OKAY.
WE UNDERSTAND THAT PROFESSOR
FIRST HAS DEVELOPED AN
ADDITIONAL DESIGN FOR SULLIVAN
SQUARE, COMPLETING HIS
EXAMINATION OF THE RUTHERFORD
AVENUE CORRIDOR, WHICH FEATURES
A REDUCED IN SIZE UNDERPASS AND
A BETTER SURFACE STREET DESIGN.
UNDERPASSES ARE EXPENSIVE AND
PRONE TO FLOODING.

THEREFORE IT'S CRITICAL THAT
THEY BE CONSTRUCTED TO AVOID
FLOODING IN DANGEROUS EVACUATION
ROUTES.

THAT WAS YOUR CONCERN,
COUNCILLOR FLYNN.

AS A DEMONSTRATION OF THE
VULNERABILITIES OF FLOODING IN
CHARLESTOWN, I HAVE ATTACHED A
REPORT OF THE NAVY YARD AND WE
HAVE INCLUDED A DAUNTING PICTURE
OF THE FLAT LAKE PROPERTY.

THE FLATLY PROPERTY PICTURE
DEMONSTRATES THE NEED FOR THE
BOSTON WATER AND SEWER
COMMISSION TO APPOINT SKILLED
CIVIL ENGINEERS THAT CAN PROVIDE
ADVICE AND COUNSEL ON STRATEGIES
TO PREVENT OR TO MITIGATE SUCH
CONDITIONS FOR THOSE HOMES THAT
CANNOT SUPPORT THE REPAIRS AND
INSTALLATION OF DEVICES TO BLOCK
SYMPTOM DRAINS AND SEWER LINES
THE CITY SHOULD AND MUST
ESTABLISH A REVOLVING LOAN FUND
OR GRANT PROGRAM TO ASSIST THESE
HOMEOWNERS WHEN SEA LEVELS BACK
UP INTO THEIR HOMES.

COUNCILLOR EDWARDS REFERENCED
SOME OF THAT HAPPENING IN
CHARLESTOWN.

IT'S NOT ACCEPTABLE FOR THE
BOSTON WATER AND SEWER COMMIT TO
SAY WE CAN DO NOTHING HERE.
THIS IS NOT OUR RESPONSIBILITY.
THAT IS NOT AN APPROPRIATE
RESPONSE FROM A CITY AGENCY.
THANK YOU AGAIN FOR THIS
OPPORTUNITY TO SPEAK.

WE HOPE THAT YOU WERE LISTENING
AND THE CITY WILL BE MORE
PROACTIVE IN ASSISTING RESIDENTS
IN FLOODING CONDITIONS AND TO BE
MORE ENGAGED.

THANK YOU.

>> THANK YOU, IVY.

JILL?

>> GOOD AFTERNOON.

MY NAME IS JILL VALDEZ.

I'M THE DIRECTOR OF POLICY FOR
BOSTON HARBOR NOW.

A NONPROFIT FOCUSED ON
OPTIMIZING THE PUBLIC BENEFITS
OF THE HARBOR AND ISLANDS,

ENSURING A HARBOR THAT IS
ECONOMICALLY THRIVING AND
ACCESSIBLE TO ALL.

I WANT TO THANK MADAM CHAIR WU
FOR THE OPPORTUNITY TO SPEAK TO
YOU ABOUT THE EFFECTS OF COASTAL
AND INLAND FLOODING IN THE CITY
OF BOSTON.

DESIGNERS AND PLANNERS HAVE BEEN
CAUTIONING WHEN IT COMES TO
FLOODING IN OUR HARBOR.

WE NEED TO ACT NOW.

CLIMATE DATA SAYS WE'RE GOING TO
GET HIT HARDER AND MORE OFTEN
AND IF WE FUND SOLUTIONS NOW, IT
WILL TAKE US LONGER AND COST
MORE TO RECOVER AFTER EVERY
STORM.

IT'S NOT AN EXAGGERATION TO SAY
THAT WE HAVE TO PLAN ON THESE
ISSUES.

TODAY WE WOULD LIKE TO ACC
KNOWLEDGE AND COMMAND MAYOR
WALSH AND THE CITY OF BOSTON FOR
THE CONTINUED LEADERSHIP ON
CLIMATE ACTION AND THE PLANNING
WORK TO PROGRAMS LIKE CLIMATE
READY BOSTON.

WE WANT TO ADVOCATE TO PROTECT
FROM THE EFFECTS OF CLIMATE
CHANGE, NOT JUST BOSTON'S CODES
BUT VULNERABLE AREAS, THE HARBOR
ISLANDS, THE WORKING PORT AND
NEIGHBORING COASTAL CITIES.

THIRD, WE WANT TO HIGHLIGHT THE
IMPORTANCE OF CREATING MULTIPLE
BENEFIT CLIMATE SOLUTIONS.

PROJECTS LIKE THE VISION PLAN,
THE EAST BOSTON GREEN WAY AND
PEARCE PARK 3 PRESENT
OPPORTUNITIES TO DESIGN
RECREATIONAL SPACES THAT PROMOTE
PUBLIC ACCESS WHILE ALSO
PROTECTING OUR NEIGHBORHOODS
FROM MAJOR FLOODS, EXTREME HEAT
AND PRECIPITATION.

WE OFFER OUR STRONG SUPPORT FOR
A FUNDING MECHANISM THAT
ADDRESSES NEAR TERM RESILIENCY
AS WELL AS LONG-TERM ADAPTATION
PROJECTS.

WE CANNOT CONTINUE TO FOCUS ON
BUILDINGS AND PARCEL BY PARCEL
STRATEGIES.

OUR INFRASTRUCTURE IS AS IMPORTANT AS OUR BUILDINGS AND WHY WE LEARNED FROM RECENT STORMS THAT STREETS LIKE ATLANTIC AND SEAPORT BOULEVARD AND THE AQUARIUM T STOP PREVENTED ACCESS TO BUILDINGS THAT WERE OTHERWISE PREPARED TO WITHSTAND FLOODING. THE DEVELOPMENT OF CLIMATE READY PROPOSING A NUMBER OF BENEFIT PROJECTS AND ARE EXAMPLES OF THE KIND OF NEIGHBORHOOD LEVEL SOLUTIONS OUR CITY NEEDS. THESE PROJECTS NEED PROPER FUNDING.

ADVOCACY GROUPS IN THE PRIVATE SECTOR NEED TO WORK TOGETHER BUT CANNOT SOLVE IT ON THEIR OWN. WE NEED LEADERS LIKE YOU TO CREATE THE FUNDING SOURCES TO BE READY FOR CLIMATE CHANGE. WE HAVE TO LOOK AT OTHER COASTAL CITIES THAT HAVE THE SAME CONCERNS.

FOR EXAMPLE, IN SEPTEMBER OF 2016, WASHINGTON D.C.'S WATER AND SEWER AUTHORITY AND INVESTORS GOLDMAN SACHS AND CALVERT FOUNDATION ISSUED A \$25 MILLION ENVIRONMENTAL IMPACT BOND TO FINANCIAL A CONSTRUCTION OF GREEN INFRASTRUCTURE TO MANAGE STORM WATER RUN OFF.

THE FIRST OF ITS KIND. THE BILL WILL LIMIT FINANCIAL RISKS TO D.C. WATER IF THE PERFORMANCE OF THE GREEN WAY WAS LESS THAN ANTICIPATED.

LAST OCTOBER THE CITY OF MIAMI APPROVED THE \$400 MILLION MIAMI FOREVER BOND BILL.

THE BOND FUNDS CONSTRUCTION PROJECTS FOCUSED ON PREPARING AND PROTECTING THE CITY'S WATERFRONT AND COMMUNITY BY INVESTING A TOTAL OF \$192 MILLION ON FLOOD PREVENTION AND SEA LEVEL RISE.

THE BOTTOM LINE IS, TO ADDRESS COUNCILLOR EDWARDS, WE LEARNED FROM AN INDEPENDENT ANALYSIS BY THE MULTI-HAZARD MITIGATION COUNSEL THAT EVERY DOLLAR SPENT SAVES \$6 IN THE LONG RUN.

THE MAYOR'S COMMITMENT IS TO ENSURE THAT CLIMATE CHANGE SOLUTIONS ARE BUILT WITH INPUT FROM COMMUNITIES IN ORDER TO ADDRESS THE REGIONAL IMPACTS THAT WE FACE AGAINST INCREASED STORMS AND FREQUENT FLOODING. PROGRAMS LIKE D.C. WATER AND MIAMI FOREVER ARE NECESSARY FOR LOCAL GOVERNMENT TO ADDRESS THE CLIMATE CHANGE ISSUES THAT CITIES AND COMMUNITIES ARE FACING.

WE WOULD LIKE TO THANK THE COUNCIL, THE PANELISTS AND FELLOW ATTENDEES FOR ENGAGEMENT TO THE SURROUNDING COMMUNITIES. BOSTON IS WIDELY RECOGNIZED AS A LEADER ON CLIMATE ACTION AND NOW IS THE TIME TO CONTINUE TO ADVANCE OUR LEADERSHIP EVEN FURTHER.

BOSTON HARBOR NOW WITH THOSE IN THE ROOM AND MANY THAT COULD NOT BE HERE TO TESTIFY WELCOME THE OPPORTUNITY TO WORK TOGETHER TOWARDS OUR MUTUAL GOAL OF PROTECTING AND PREPARING OUR CITY FOR A FUTURE THAT WILL CONTINUE TO THRIVE AND ADAPT TO THE EFFECTS OF CLIMATE CHANGE. THANK YOU FOR YOUR TIME.

>> THANK YOU, JILL.

AND FINALLY, AMBER.

>> THANK YOU, MADAM CHAIR WU AND THE CITY COUNCIL FOR HOLDING THIS HEARING.

I'M AMBER KRISTOFFERSON.

WE WERE FOUNDED IN 1972.

OUR ORGANIZATION REPRESENTS THE INTERESTS OF 500,000 RESIDENTS AND 22 TOWNS AND CITIES ACROSS THE WATERSHED.

WE WORK TO RESTORE WATER QUALITY, PROTECT PUBLIC HEALTH AND INCREASE RESILIENCY TO THREE IMPORTANT CLIMATE STRESSORS.

FLUCTUATING TEMPERATURES, FLUCTUATING SEA LEVEL RISE.

WE HAVE FOUR SPECIFIC CONCERNS RELATED TO THE BOSTON NEIGHBORHOODS LOCATED IN THE LOWER MYSTIC RIVER.

CHARLESTOWN AND EAST BOSTON.

THESE LOW-LYING COMMUNITIES ARE SOME OF BOSTON'S MOST TROUBLESOME.

SECOND, WE'RE CONCERNED ABOUT TOXIC RELEASED INTO THE MYSTIC AND SURROUNDING NEIGHBORHOODS FROM CURRENT AND HISTORIC INDUSTRIAL SITES.

MANY SITES LIKE SEA WALLS OR BULKHEADS TO PREVENT TOXIC CHEMICAL RELEASES AS OCCURRED IN HURRICANE HARVEY IN HOUSTON.

WE ASK THE CITY WORK WITH THE DEP AND BROWNSFIELDS TO PREVENT TOXIC RELEASES THAT COULD CONTAMINATE THE NEIGHBORHOODS AND HARBOR.

AND THEN, THE AMELIA ERHARDT DAM.

WE ASKED THE CITY WORK WITH THE DOWNSTREAM OWNERS OF THE DAM TO CAUSE SALTWATER FLOODING.

OF THESE PROPERTIES, FOUR ARE IN THE PROCESS OF ELEVATING THEIR PROPERTIES.

WYNN CASINO AND MORE.

WE DON'T BELIEVE THE MYSTIC GENERATING STATION POWER PLANT AND THE GATE WAY CENTER MALL OWNED BY DDRC HAVE PLANS TO DO SO.

FINALLY, FLOOD MANAGEMENT PROJECTS ARE EXPENSIVE.

BECAUSE THEY SPEND MONEY IN THE SHORT TERM TO PROTECT THE CITY FROM DAMAGE IN THE FUTURE, COST BENEFIT A FALL CEASE COME OUT NEGATIVE.

THAT IS BECAUSE OF DISCOUNT RATES, THE COSTS ARE SHOWN AS LARGER THAN THE BENEFITS.

IN ORDER TO MAKE THE MOST OF EVERY DOLLAR SPENT, THE FLOOD MANAGEMENT PROJECTS NEED TO BE DESIGNED TO PROVIDE MULTIPLE BENEFITS AS JOE MENTIONEDS SO AS RECREATIONAL OPEN SPACE, WATER QUALITY IMPROVEMENTS OR RESTORED HABITAT.

THE BENEFITS HAVE THE COST BENEFIT CALCULATIONS NEEDED TO SECURE PUBLIC FUNDING.

THANKS FOR HOLDING THE HEARING. WE'LL BE HAPPY TO WORK WITH YOU

IN THE FUTURE TO PROTECT THE
HUMAN AND NATURAL
CHARACTERISTICS OF THE RIVER.

>> THANK SO MUCH.

NOW I'D LIKE TO WELCOME OUR
SECOND PANEL OF EXPERTS.

WENDY GOLDSTEIN, PETER
RICHARDSTON AND JAY WICKERSHAM.

I KNOW A FEW OF YOU HAVE TIME
CONSTRAINTS.

WE'LL GET TO YOU QUICKLY.

MAKE YOUR WAY DOWN HERE.

I BELIEVE WENDY YOU HAVE TO
LEAVE SHORTLY.

OUR APOLOGIES.

WE WANT TO GET TESTIMONY
THROUGHOUT TO FOLKS THAT ARE NOT
WAITING THREE HOURS UNTIL THE
END.

WHY DON'T WE START WITH WENDY,
HEAR YOUR STATEMENT AND MAYBE
TAKE ANY QUESTIONS AND THEN DO
THE SAME FOR DAVID AND THEN I
THINK WE MIGHT HAVE A LITTLE
MORE TIME?

>> YES.

>> WENDY, PLEASE.

>> AS HAS ALREADY BEEN DISCUSSED
BY COUNCILLOR EDWARDS AND
SEVERAL OTHER PEOPLE PRESENTED
SOME TESTIMONY, THERE'S THE
RECOGNITION THAT THE FLOOD
ISSUES DON'T HAPPEN IN A SIMPLE
WAY.

>> JUST INTRODUCE YOURSELF, TOO.

>> SURE.

DR. WENDY GOLDSMITH WITH THE
CENTER FOR URBAN WATERSHED
RESILIENCE.

I'VE BEEN INVOLVED IN POLICY AND
OVERSIGHT OF ENGINEERING
PROGRAMS IN AN AROUND THE BOSTON
AREA AND MASSACHUSETTS.

MOST NOTABLY, AFTER HURRICANES
KATRINA AND SANDY HIT IN
NEW YORK METRO AREA.

I'VE BEEN INVOLVED IN THE POLICY
AND PRACTICE AND WORKING ON AN
INSURANCE CONSORTIUM FUNDED
PROJECTS AND PROGRAM TO DEFINE
WHAT CLIMATE RESILIENCE MEANS IN
A WAY THAT MATTERS TO THE
UNDERWRITERS OF MAJOR INSURANCE
POLICIES.

ALTHOUGH THAT'S NOT A SETELED
MATTER, IT'S GETTING CLOSER.
IT'S ALWAYS SITE SPECIFIC AND
GOAL SPECIFIC AS WELL.
SO GOING BACK TO THE ISSUES THAT
HAVE BEEN AFFECTING
NEIGHBORHOODS AROUND BOSTON.
YOU KNOW, THERE'S AN ISSUE THAT
STORM WATER PIPES WORK BOTH
WAYS.

OLD INFRASTRUCTURE DOESN'T OFTEN
MEET INTENDED DESIGN FUNCTION.
THERE'S OFTEN CONDITION ISSUES
OR ELICIT CONNECTION ISSUES THAT
CAUSE WATER TO GET INTO OR LEAK
OUT OF A PIPE IN WAYS THAT WERE
NOT ANTICIPATED.

THIS LEADS TO THE FINGER
POINTING AND NONACCOUNTABLETY
ISSUES THAT ARE OFTEN A REAL
PROBLEM FOR PROPERTY OWNERS.
I WANT TO SUGGEST THE MORE
BOLDER ISSUES THAT HAVE BEEN ON
THE TABLE FOR MANY YEARS IN
BOSTON, WHILE I'M NOT A FAN THAT
A BARRIER IS THE BE ALL AND END
ALL SYSTEM, DOING ANYTHING LESS
THAN A COMPREHENSIVE TYPE OF
SYSTEM, WHICH THAT CONSISTS OF
MULTIPLE LINES OF DEFENSES AND
STRATEGIES, THEY WORK OUT BEST.
FOR INSTANCE, WHAT THE \$14
BILLION FEDERALLY FUNDED PROGRAM
FOR GREATER NEW ORLEANS USED.
A GREEN AND GRAY INFRASTRUCTURE
ORIENTED PROGRAM THAT CAUSED \$14
PLUS BILLION.

COMPREHENSIVELY CAME UP WITH
FLEXIBLY OPERABLE BARRIERS THAT
CAN BE OPENED AND CLOSED, PULLS
THAT OPERATE THIS WAY OR THAT
WAY.

ALL THESE THINGS HAD TO WORK
TOGETHER.

WE HAVE NETWORK AND SYSTEMS AND
THE SCRIPTED AND INTENTIONAL
WAYS AND UNSCRIPTED AND
SURPRISING WAYS.

SO THESE ARE THINGS THAT I THINK
HAVE BEEN -- THEY CONTINUE TO BE
TAKEN SERIOUSLY AND I ENCOURAGE
CITY COUNCIL TO BE INVOLVED IN
CONVENING FULLY STRUCTURED AND
COMMUNITY ENGAGEMENT-BASED

SCENARIO PLANNING PROCESS TO
HELP EVERYONE REALLY UNDERSTAND
AND SHARE INPUT THAT HELPS SET
BOSTON SPECIFIC STANDARDS TO
GUIDE THE PROCESS GOING FORWARD.
THANK YOU.

MY APOLOGIES FOR RUNNING OUT BUT
I WANT TO HEAR COMMENTS OF
OTHERS.

>> QUESTIONS FOR WENDY?

ANY SPECIFIC SUGGESTIONS FOR THE
FINANCING PIECE?

OTHERS HAVE SAID IT AS WELL.
THIS IDEA OF THE STANDARD
BENEFIT COST ANALYSIS, DOES
HEAVY FUTURE-BASED DISCOUNTING.
AS FOR THE BENEFITS, WE'RE GOING
TO APPLY A DISCOUNT RATE THAT
MAKES THE FINANCIAL BENEFITS
PERHAPS TO PALE BY COMPARISON
WITH THE COSTS.

CITIES LIKE HOUSTON FIND
THEMSELVES FEELING PENNY-WISE
AND POUND FOOLISH WHEN THE
IMPLICATION COMES HOME TO ROOST.
SO ITS IMPORTANT TO BE HIGHLY
FUNCTIONAL AND MAKE SURE THAT
ANY INFRASTRUCTURE INVESTMENT
IMPROVES RESILIENCE.

FUNCTION THAT ONE IN A 1,000
TYPE SCENARIO CHANCE IS DESIGNED
FOR PERHAPS BUT PROVIDING
COMMUNITY VALUE OF MANY
DIFFERENT TYPES GOING FORWARD.
THIS IS THE ONLY WAY I'M AWARE
OF THAT THE COMMUNITY CAN HAVE
AVOID TO HELP UNDERSTAND AND
DEFINE HOW TO STRIKE THE
BALANCE.

HOW DO DEFINE WHICH OF THE
MULTIFUNCTIONAL ATTRIBUTES ARE
VALUABLE TO THE COMMUNITY.
SOME OF THESE THINGS ARE NOT
THINGS THAT HAVE A FINANCIAL
VALUE THAT ARE READILY APPARENT.
IN DETROIT, FOR INSTANCE,
SOMEBODY PROBABLY HAD SOME TYPE
OF COST BENEFIT ANALYSIS I DON'T
KNOW.

IT'S VERY POLITICALLY FRAUGHT
SITUATION.
THEY SPENT MONEY ON WATER HERE
AND THERE.
BUT AT WHAT COST?

MAYBE YOU CAN'T MONETIZE THE HEALTH OF YOUR POPULATION AND CHILDREN IN PARTICULAR.

WHEN IT COMES TO A DISASTER, YOU HAVE THE DIRECT AND INDIRECT FLOOD IMPACTS.

YOU HAVE THE FLOODED PROPERTY BUT YOU HAVE BUSINESS INTERVENTION, PEOPLE THAT DECIDE NOT TO COME BACK AND INVEST LIKE HOUSTON IS FACING, MIAMI IS FACING.

NEW ORLEANS SEEMS TO BE ON THE REBOUND.

NOBODY IS LEAVING NEW YORK JUST YET.

BUT SOME CITIES HAVE HAD VERY NOTABLE PROBLEMS RECOVERING AFTER IMPACT AND PROPERTY VALUES DECLINE.

EVEN WITH HURRICANE SANDY, SOME OF THE NEW JERSEY COAST COMMUNITIES ARE HAVING A VERY DIFFICULT TIME, EVEN HAVING A TAX BASE TO JUSTIFY THEIR CURRENT BOND OBLIGATIONS LET ALONE TAP INTO SOME REINVESTMENT FUNDS.

I'M SURE THE CITY IS ALREADY AWARE THAT MOODY'S ANNOUNCED LATE LAST YEAR THAT THEY WANT EVERYONE PUT ON NOTICE THAT THEY NOW REQUIRE CLIMATE CHANGE CONSIDERATIONS TO BE PART OF -- THEY'RE LOOKING AT IT AND HAVE BEEN LOOKING AT IT.

THEY'RE COMMUNICATING TO FOLKS THAT SEEK PUBLIC FINANCE THAT, YOU KNOW, YOU HAVE TO BE PREPARED TO JUSTIFY WHAT YOU'RE SEEKING HAS A REASONABLE BASIS BASED ON THE KNOWN CLIMATE FORECASTS.

>> GREAT.

SO AS THAT IS HAPPENING AND AS THE KIND OF PRIVATE INSURANCE MARKET CONTINUES TO INVOLVE WITH YOUR WORK, ARE THERE ANY PUBLIC PRIVATE PARTNERSHIPS THAT HAVE BEEN PARTICULARLY NOTABLE IN OTHER CITIES?

>> IT'S INTERESTING.

CITY GUIDANCE AND PRIVATE INVESTMENT ON A PARCEL BY PARCEL

BASIS HAVE YIELDED RESULTS.
THEY HAVE TO INVEST THEIR MONEY
TO -- ANYWAY, DIFFERENT WAYS TO
GET BUY-IN FROM THE INSURANCE
INDUSTRY AND THE REINSURANCE
SECTOR TO NOT ONLY CONTRIBUTE
PARTIALLY TO THE FINANCING OF
SOME REGIONAL SCALE
INFRASTRUCTURE RESILIENCE
MEASURES, BUT ALSO TO REFLECT
THAT IN SOME OF THE PUBLIC AND
PRIVATE INSURANCE PROGRAMS.
THE COMMUNITY RATING SYSTEM IS A
VERY IMPORTANT AND OFTEN
UNDERUTILIZED PROGRAM TO HELP
MAKE THE FEDERAL INSURANCE
PROGRAM WORK BETTER AT THE
COMMUNITY SCALE.

IN ADDITION TO THAT, YOU KNOW
WHAT DRIVES THE ECONOMY OF A
CITY IS A LOT OF PRIVATE
INVESTMENT AND CORPORATE
INSURANCE THAT MANAGES RISK FOR
BUSINESSES.

SO YOU HAVE TO SPEAK TO THOSE
PARTIES AS WELL AND IT'S
IMPORTANT TO GET THEM INVOLVED,
THE INSURANCE COMPANIES THAT
SUPPORT RISK MANAGEMENT.

>> THANKS VERY MUCH FOR YOUR
TIME.

I KNOW YOU CAME A LONG WAY.
DAVID?

>> THANK YOU, COUNCILLORS AND
FOR THE OPPORTUNITY TO SPEAK.

I DAVID LEVY.

I'VE BEEN HERE 32 YEARS DESPITE
THE ACCENT.

I'M A PROFESSOR IN A BUSINESS
SCHOOL AND ALSO PART OF OUR
SUSTAINABLE SOLUTIONS LAB, WHICH
HAS BEEN DOING A LOT OF THIS
WORK AROUND CLIMATE READY
BOSTON, THE HARBOR, THE BARRIER
AND I'VE BEEN LEADING THIS
REPORT ON RESILIENCE FINANCE,
WHICH WILL BE RELEASED APRIL 13
AT A PUBLIC EVENT.

I HAVE TO RUN OFF BUT REBECCA IS
HERE, EXECUTIVE DIRECTOR.
YOU CAN DIRECT QUESTIONS TO HER.
SO YOU'VE HEARD A LOT ABOUT
THIS.

IT GO THROUGH THE CHALLENGES AND

OUTLINE AND HOW WE THINK ABOUT
FINANCING THESE SOLUTIONS.
WE DO NEED TO BALANCE THE
EXPECTED COSTS OF ENACTS, THE
FLOOD, THE DAMAGE THAT GETS
CAUSED WITH THE COST OF BUILDING
OUT RESILIENCE.

NOAA JUST CAME OUT WITH A FIGURE
THAT THAT THE CLIMATE DISASTERS
LAST YEAR COST OVER \$300
BILLION.

IT'S A RECORD AMOUNT.

WE'RE IN A NEW NORMAL WHERE WHAT
WE USED TO THINK OF A HUNDRED
YEAR FLOOD, IT'S A 20 YEAR FLOOD
OR 30 YEARS FLOOD BUT WE'LL SEE
MORE DAMAGE AS WE SAW IN BOSTON.
I HAVEN'T SEEN NUMBERS FOR THE
TWO STORMS IN JANUARY AND
FEBRUARY COST IN BOSTON.

AND ANOTHER POINT TO MAKE HERE
IS THAT MASSACHUSETTS AND BOSTON
IS THRIVING IN A LOW CARBON
ECONOMY.

MEANING THAT AS WE SHIFT TOWARDS
A LOW CARBON ECONOMY, THERE'S A
LOT OF EMPLOYMENT OPPORTUNITIES.
IF WE THINK WISELY ABOUT THE
TENS, HUNDREDS AND POTENTIALLY
BILLIONS WE'LL HAVE TO SPEND
OVER SEVERAL DECADES, IF WE DO
IT WISELY, WE CAN ADDRESS EQUITY
AND IMPROVE HOUSING, ACCESS TO
EMPLOYMENTS AND HEALTH CARE AND
THAT HAS TO BE PLANNED.

CLIMATE READY BOSTON RECORDS, I
CAN'T GO THROUGH THEM NOW BUT
THEY SET THE TONE FOR THIS.
RANGES OF SEA LEVEL RISE WILL
MAKE THINGS WORSE OVER THE
DECADES.

THE CLIMATE READY BOSTON RECORDS
TARGET A 36-INCH TOWARDS THE SEA
LEVEL RISE.

BUT WE'RE ALSO HEARING FIGURES
OF FOUR FEET TOWARDS SIX OR
SEVEN FEET.

SO THE 36 INCHES IS A -- MAYBE A
MODEST THING WE HAVE TO PLAN
FOR.

INCREASES IN EXTREME HEAT
RELATED ILLNESSES AND DEATHS AND
MAYBE MOST RELEVANT FOR TODAY,
THE ANNUAL ONCE WE GET TO A

36-INCH SEA LEVEL RISE SCENARIO,
WE'RE TALKING ABOUT AN
ANNUALIZED COST OF AT LEAST \$1.5
BILLION.

YOU CAN SEE THAT DAMAGE TO
BUILDINGS, DAMAGE TO CONTENT AND
LOST BUSINESS.

I TEND TO THINK THESE ARE
CONSERVATIVE ESTIMATES WHEN YOU
DIG INTO THE METHODOLOGY.

SOME OF THE BIG COSTS THAT WE
MIGHT NEED TO BE THINKING ABOUT
IN TERMS OF RESILIENCE, THE
HARBOR BARRIER STUDY.

WE CAN'T TALK ABOUT COSTLY BROAD
SCENARIOS.

THAT WILL BE RELEASED SOON.
BUT ORDER OF MAGNITUDE, SOME
PEOPLE SAY 10 TO 20 BILLION.
THE OTHER PICTURE THERE IS
THAMES BARRIER.

COST \$2.5 BILLION.
GIVES YOU A SENSE OF THE SCALE
OF MONEY.

NOT THAT WE'RE ADVOCATING FOR A
HARBOR BARRIER.

THERE'S REASON WHY NEIGHBORHOOD
LEVEL INVESTMENTS MUST PROVIDE
MORE CO-BENEFITS AND AN
INCREMENTAL APPROACH AND MORE IN
TERMS OF EQUITY AND DEVELOPMENT.
SO WE HAVE THE NUMBERS IN FROM
EAST BOSTON AND CHARLESTOWN.

MODEST NUMBERS.
TENS OF MILLIONS PHASED OVER THE
NEXT SEVERAL DECADES.

SOUTH BOSTON COULD BE A LOT
MORE.

AGAIN, NUMBERS ARE NOT
OFFICIALLY REPORTED.
WE'RE LOOKING CLOSELY TO HALF A
BILLION ON THE HIGH END.
DOWNTOWN BOSTON COULD BE QUITE
SIMILAR.

SO ESTIMATES.
THESE ARE BROAD SCENARIOS.
I'M NOT ALLOWED TO SAY HERE.
WE HAVE TO BE CAREFUL WITH WHAT
WE SAW.

SOMEWHERE IN THIS 1 TO 2 BILLION
RANGE WHERE WE TALK ABOUT
PHASING OVER DECADES, WHICH IS
INCLUDE.

BOSTON WON'T BE ABLE TO SUPPORT

THIS ITSELF WITH ITS CURRENT TAX
BASE.

LITTLE HARD TO SEE THIS.

THIS IS JUST A DIAGRAM OF THE
PHASING OF DIFFERENT SPECIFIC
INVESTMENTS NEEDED IN EAST
BOSTON.

WHEN YOU LOOK AROUND THE EAST
BOSTON PERIMETER -- THIS IS
GOING BACKWARDS.

WHEN YOU LOOK AROUND THE EAST
BOSTON PERIMETER, THERE'S
PARCELS.

SOME PRIVATE, SOME MIGHT BE
REDEVELOPED.

SO THE FINANCING OPPORTUNITIES
FOR EACH OF THESE ARE DIFFERENT.
SOME ARE PUBLIC LAND, INNOVATION
OF ROADS.

SO WE HAVE TO LOOK AT THE WHOLE
PERIMETER AROUND THINK ABOUT
ALMOST PARCEL BY PARCEL.

WILL IT BE REDEVELOPED IN THE
NEXT FIVE YEARS.

HOW MUCH WILL THE PRIVATE OWNERS
PUT IN.

IS IT A RETRO-FIT THAT MIGHT BE
MORE EXPENSIVE.

IS IT PUBLIC LAND.

SOME IS MASS PORT.

THEY'RE ALREADY COMMITTED TO
ELEVATE AND PERFECT SOME OF
THOSE AREAS.

SO EACH AREA IS COMPLEX AND WILL
NEED A DEEPER DIVE INTO THE
PARCELS AND PERIMETER THAT MAKE
THAT UP.

AS WE INVEST IN THIS, IN THESE
AREAS, WE HAVE TO ACKNOWLEDGE
THAT CLIMATE CHANGE ITSELF IS
GOING TO EXACERBATE

VULNERABILITIES OF VARIOUS
NEIGHBORHOODS.

THE POOR IN THE NEIGHBORHOODS,
THE VULNERABLE MINORITIES AND
SOME OF THESE AREAS ALREADY HAVE
LOWER INSURANCE, POORER
FINANCIAL RESOURCES IN TERMS OF
THE ABILITY TO RECOVER, LESS
ACCESS TO HEALTHCARE AND
TRANSPORTATION.

AND THE HOUSING IN THOSE AREAS
MIGHT BE LESS RESILIENT FOR
VARIOUS REASONS.

SO IT'S ALSO IMPORTANT TO
ACKNOWLEDGE THAT.
UNDERSTAND HOW ADAPTATION
INVESTMENTS IF NOT DONE WELL CAN
EXACERBATE THE HOUSING AFFORD-
ABILITY AND ACCELERATE
GENDERIFICATION.

WE CAN CHANNEL THE INVESTMENTS
TO VERY INVENT PARTS OF THE CITY
TO MAKE THEM BOTH VIBRANT
ECONOMICALLY AND SUSTAINABLE AND
MORE AFFORDABLE.

SO FINANCE AND EQUITY, QUITE
COMPLEX.

SOMETIMES THERE'S A TRADE-OFF.
FAIRNESS IN TERMS OF PEOPLE
PAYING IN RELATION TO THE
PROTECTION THAT THEY'RE GETTING,
THAT SOUNDS FAIR, BUT MIGHT NOT
ALWAYS BE EQUITABLE BECAUSE LOW
INCOME NEIGHBORHOODS MIGHT NOT
BE ABLE TO PAY FOR THE AMOUNT OF
PROTECTION THAT IS NEEDED.
SEEM TO BE MOVING ON HERE BY
ITSELF.

JUST MIGHT HAVE TO MOVE ON HERE.
SOME KEY RECOMMENDATIONS FROM
THE REPORT.

A KEY ASPECT IS MOVING MULTIPLE
LAYERS JUST AS WE NEED MULTIPLE
LAYERS OF RESILIENCE, WE NEED
MULTIPLE LAYERS OF FUNDING FROM
FEDERAL SOURCES, FROM STATE,
CITY AND FROM RESILIENT
DISTRICTS.

THE PRINCIPLE HERE IS THE CLOSER
YOU GET TO BEING DIRECTLY
PROTECTED IN A RESILIENT
DISTRICT, WE NEED TO RECOGNIZE
THAT BOSTON IS THE ECONOMIC
ENGINE OF THE CITY AND IF THE
AIRPORT GOES DOWN, THE CENTER OF
THE CITY GOES DOWN, THE WHOLE OF
MASSACHUSETTS IS AFFECTED.

OF COURSE, WE HAVE TO TAP
FEDERAL FUNDING TO THE EXTENT
THAT IT'S AVAILABLE.

WE NEED TO LEVERAGE INCENTIVES.
WE TALK ABOUT PUBLIC, PRIVATE
PARTNERSHIPS.

ONE OF THE BEST WAYS TO MOBILIZE
CAPITAL IS TO HAVE RISK-BASED
INSURANCE SO PRIVATE PROPERTY
OWNERS HAVE THE INCENTIVE TO

UPGRADE THEIR OWN PROPERTIES AS WE HAVE THE DISTRICT LEVEL NEIGHBORHOOD SOLUTIONS, THINGS LIKE THE CRS, FEMA AND CRS. GOING TO GIVE PRIVATE PROPERTY OWNERS DISCOUNTS. THERE HAS TO BE METHODS OF VALUE CAPTURE.

IT'S THE CITY AND STATE THAT ARE BEARING THE COSTS AND PRIVATE PROPERTY OWNERS WHO ARE BEARING THE BENEFITS SOMETIMES IN TERMS OF THE REDUCED INSURANCE COSTS. SO OBVIOUSLY WE NEED TO LOOK AT VALUE RECAPTURE MECHANISMS.

THE BUILDING LEVEL, WE'RE PROPOSING EXPANDING SOMETHING LIKE THE MASS SAVE PROGRAM FROM ENERGY EFFICIENCY TO RESILIENCE. SO SMALL SURCHARGES ON WATER BILLS AND PERHAPS BECAUSE IT'S MORE INFRASTRUCTURE BASED THAN ENERGY BASED COULD POTENTIALLY FUND AN EQUIVALENT PROGRAM OF ASSESSMENTS, AUDITS AND ASSISTANCE WITH UPGRADES THIRD READING.

ON TO THE NEXT ONE.

NOT QUITE WORKING.

YEAH, THIS IS A -- SHOULD BE TAKEN AS A BROAD SCENARIO OF PAYMENT WITH THE FEDS MAYBE PAYING A BIT LESS THAN THEY HAVE IN THE PAST.

THEY PAID 50%, MAYBE LESS IN THE FUTURE FOR REASONS THAT ARE OUTLINED.

WHO KNOWS HOW LONG THE CURRENT ADMINISTRATION WILL BE THERE AND THE IMPLICATIONS WILL BE.

BETWEEN FEDERAL -- THE STATE LEVEL POTENTIALLY, THERE WAS PROPOSALS FOR A CARBON TAX. ANOTHER MIGHT BE EXPANDING FUNDING THROUGH THE CAP AND TRADE SYSTEM.

TAXING CARBON ONE WAY OR ANOTHER DOES MEAN THAT YOU ARE TAXING AT THE SOURCE.

ECONOMISTS LIKE THIS BECAUSE IT'S ECONOMICALLY EFFICIENT, RIGHT?

IT'S PUTTING A PRICE ON CARBON IN ORDER TO PAY FOR THE PROBLEMS

THAT EXCESS CARBON EMISSIONS ARE CAUSING.
ALSO WE ARE SUGGESTING -- THIS IS A SCENARIO.
SHOULDN'T BE TAKEN AS ANYTHING SPECIFIC OR BINDING.
WE'RE NOT AN OFFICIAL -- IN ISN'T AN OFFICIAL CITY OF BOSTON REPORT.
IT'S GENEROUSLY FUNDED BY THE BAR FOUNDATION.
WITH -- WE HAVE TO LOOK AT A SPLIT AT FEES FOR STORM WATER AND PROPERTY TAXES.
THE REASON FOR THAT IS ONLY AROUND HALF OF PROPERTIES I UNDERSTAND OR 60% OF PROPERTIES IN BOSTON ARE SUBJECT TO PROPERTY TAXES.
WATER IS MORE EQUITABLE IN TERMS OF ITS USAGE.
A LOT OF THIS IS GOING TO BE ABOUT EXTREME PRECIPITATION AS WELL.
AND, YOU KNOW, WHAT THE NUMBERS INDICATE, YOU CAN'T GET AWAY FROM PAYING FOR THIS.
THERE IS A REAL RESOURCE COST. HOWEVER, PEOPLE TALK ABOUT CATASTROPHE BONDS, THE ENVIRONMENTAL IMPACTS AND OTHER CONTINGENT BONDS.
ONE WAY OR ANOTHER, WE HAVE TO PAY FOR.
THERE'S LOTS OF BENEFITS. PARKS, BEAUTIFYING THE CITY, IMPROVED TRANSPORTATION.
BUT THERE'S A REAL COST HERE THAT WE CAN GET AWAY FROM.
ONE OF THE LARGEST SOURCES OF FUNDING THAT WE SHOULD MENTION IS THE BUILDING THAT WILL BE HAPPENING ANYWAY IN TERMS OF NEW DEVELOPMENT, REDEVELOPMENT, DEFERRED MAINTENANCE.
SO THAT IS MONEY WITH THE RIGHT CODES IN PLACE.
THAT HE BE LEVERAGED FOR RESILIENCIES.
THESE UPGRADES ARE ON TOP OF THAT.
I WANT TO LEAVE IT THERE ONE LAST SLIDE.
JUST SHOWING 100,000 JOBS IN

BOSTON FROM CLEAN ENERGY.
NEARLY 8,000 FIRMS THAT THIS
SECTOR HAS BEEN BOOMING 10% A
YEAR, FAR FASTER THAN THE
REGULAR ECONOMY EVEN THROUGH THE
RECESSION HERE.
THERE'S OPPORTUNITIES TO LEVER
CLIMATE CHANGE FOR COMMIT
BENEFIT.

THERE'S SIMILAR WAYS TO DO THIS
WITH THE MONEY THAT WE'RE GOING
TO NEED TO SPEND FOR RESILIENCE.
THANK YOU.

>> THANK YOU VERY MUCH.
I KNOW YOU HAVE JUST A FEW
MINUTES LEFT.
SO WE'LL JUMP IN TO A FEW
QUESTIONS.

YOU MENTIONED THE POTENTIAL OF
SURCHARGE ON THE WATER BILL AS A
WAY THROUGH SMALL BUT WIDESPREAD
ASSESSMENT TO A MASS A FUNDING
SOURCE.

FROM WHAT I'VE SEEN IN CITIES IN
EUROPE, THEY HAVE A SEPARATE
WATER AUTHORITY THAT IS
INSULATED FROM POLITICAL CYCLES
AND HAS CHARGE OF THE WATER
INFRASTRUCTURE.

IN MASSACHUSETTS AND BOSTON, IS
THAT SOMETHING THAT YOU WOULD
SEE ATTACHED TO BOSTON WATER AND
SEWER OR NWRA OR WHAT IS THE
APPROPRIATE SCALE IN THIS AREA?
>> YES.

I'M NOT REALLY THAT QUALIFIED TO
SPEAK ABOUT THE GOVERNANCE SIDE
OF THIS.
THE MWRA.

THERE'S MODELS WHERE A WATER
AUTHORITY CAN BE EXPANDED TO
COVER BOTH EXTREME
PRECIPITATION, FLOODING FROM
SALTWATER AND FROM EXTREME
PRECIPITATION.

THERE ARE OTHER MODELS WHERE THE
WATER AUTHORITY IS ABOUT
FRESHWATER SUPPLIES AS WELL AS
FLOODING.

THERE'S VARIOUS AUTHORITIES.
AND IN SOME AREAS THERE'S WATER
AUTHORITIES PROVIDING INSURANCE.
SO ACROSS EUROPE, THERE'S A LOT
TO LEARN ABOUT THE WAY A WATER

AUTHORITY COULD BE STRUCTURED.
THERE COULD BE A SEPARATE
FINANCING AUTHORITY AT THE METRO
REGIONAL LEVEL.

ONE OF THE LESSONS WE'VE LEARNED
IS THAT WE HAVE A DEFICIT OF
GOVERNANCE AT THE NEIGHBORHOOD
LEVEL, EAST BOSTON.

OBVIOUSLY WE HAVE THE CITY.
AND THE METRO REGIONAL LEVEL
THAT EASTERN MASSACHUSETTS,
SOMEWHERE IN BETWEEN THE STATE
AND THE CITY, THE REGION HAS
SOME COORDINATING MECHANISMS BUT
NOT REALLY GOVERNMENT AND
FINANCE MECHANISMS.

WE'VE IDENTIFIED THAT.

I WOULDN'T SAY WE HAVE SPECIFIC
SOLUTIONS.

>> GIVEN YOUR WORK ON THE
SCIENTIFIC SIDE AND THE
FINANCING, WHAT IS THE ONE MOST
IMPORTANT THING THAT YOU THINK
THE CITY SHOULD FOCUS ON FIRST?

>> I THINK BUILDING OUT FROM
THESE NEIGHBORHOOD LEVEL STUDIES
THAT HAVE BEEN COMPLETED FOR
CHARLESTON AND EAST BOSTON AND
WELL UNDERWAY FOR SOUTH BOSTON.
DEVELOPING THOSE PLANS, ENGAGING
THE COMMUNITIES AND THINKING HOW
THIS MONEY WILL BE RAISED.
LOOKING PARCEL BY PARCEL AND
DEVELOPING A PLAN, A LINING
REDEVELOPMENT PLANS WITH
NEIGHBORHOOD PLANS AND THINKING
ABOUT THE SPREAD BETWEEN FEDERAL
AND STATE AND CITY LEVEL FUNDING
AND DISTRICT LEVEL FUNDING.
DEVELOPING SCENARIOS AND GETTING
BY.

THIS IS SIGNIFICANT MONEY AND
RECHANGING THE MONEY FOR THE
REST OF THE CENTURY.

A BIG JOB.

>> COUNCILLOR O'MALLEY?
EDWARDS?

>> VERY BRIEFLY ECHO YOUR
APPROACH, PROFESSOR.
YOU TALK ABOUT REGIONAL
COORDINATE AND ONE OF THE THINGS
THAT STRUCK ME GOING THROUGH
THAT INFORMATIVE SLIDE SHOW.
YOU KNOW, THE CONSERVATIVE --

RELATIVELY CONSERVATIVE
ESTIMATES SUGGEST THE SEA LEVEL
COULD RISE THREE FEET OR MORE BY
THE TURN OF THE CENTURY.
LOGAN COULD BE UNDER WATER.
MASS PORT HAS DONE GOOD THINGS.
TO INCLUDE THEM IN THIS
CONVERSATION WHEN SOUTH BOSTON
FLOODS, QUINCY WILL FLOOD.
HAVE YOU SEEN ANY MODEL OF OTHER
STATES THAT LOOK -- I GUESS THE
STATE GOVERNMENT -- THAT WOULD
HELP COORDINATE PLAN GREEN AND
GRAY INFRASTRUCTURE AND LEVIES?
I'LL ASK YOU THE QUESTIONS I
ASKED THE LAST PANEL.
WHAT IS THE GOLD STANDARD THAT
CITIES AND STATES ARE DOING TO
ADDRESS A REGIONAL HOLISTIC
APPROACH?
>> YEP.
I DON'T KNOW ABOUT A GOLD
STANDARD.
MIAMI IS WELL-ADVANCED ON THIS.
BUT THE AUTHORITY AND AMERICAN
GOVERNANCE IS A CHALLENGE.
IT WILL TAKE MORE COORDINATION.
THE CITY IS PROBABLY GOING TO
LEAD IT HERE.
SOMEBODY MENTIONED THE CHARLES
RIVER DAM AND THAT AFFECTS
CAMBRIDGE AND OTHER CITIES HERE.
SO WAYS TO COORDINATE THEIR
FUNDING AND PLANNING.
YOU KNOW, IT'S A CHALLENGE.
I DON'T HAVE A SIMPLE SOLUTION.
WE'LL BE EVOLVING THESE
SOLUTIONS AS WE GO ALONG.
I'M NOT AN EXPERT ON THE
GOVERNANCE SIDE.
THERE'S A SEPARATE SECTION OF
THIS.
SO SORRY I CAN'T ANSWER THAT.
>> NO, THAT'S HELPFUL.
I'D SAY I WONDER -- THIS IS A
RHETORICAL QUESTION -- A
MAJORITY OR CLOSE TO A MAJORITY
OF LAND IS TAX EXEMPT.
MANY OF YOUR ASSOCIATIONS FALL
UNDER THESE SITUATIONS.
MANY NONPROFITS HAVE STEPPED UP.
BOSTON MEDICAL STANDARD IS A
GOLD STANDARD.
THEY'LL HAVE ZERO CARBON BY THE

END OF THE CALENDAR YEAR.
MAYBE THERE'S AN OPPORTUNITY
HERE TO SORT OF READDRESS THE
QUESTIONS WITH THESE NONPROFITS,
THESE HUGE EXPANSIVE
INSTITUTIONS TO MAKE SURE THAT
WE CAN HELP OFFSET SOME OF THE
COSTS AND JUST NOT PUT IT ALL ON
BUSINESS AND RESIDENTS.
SO THAT'S A TOUGH CONVERSATION
THAT WE NEED TO HAVE.

>> THAT'S RIGHT.

I THINK LABELLING THIS AS A
RESILIENCE FEE AND TRYING IT TO
METRICS LIKE WATER, IMPERVIOUS
SERVICES IS A WAY TO GET IT OUT.
PEOPLE THAT BUILD AND HOLD THEIR
PROPERTIES FOR A LONGER TIME
RECOGNIZE THE VALUE IN
RESILIENCE AND WILL INTERNALIZE
THAT VALUE THEMSELVES AND THEY
CLAIM TO BE RENTING OUT BUILDING
AND LEAD PLATINUM BUILDINGS.
THEY CLAIM TO BE GETTING HIGHER
RENT.

THERE'S LOCAL BENEFITS AS WELL
THAT ORGANIZATIONS --

>> NO QUESTION TO MY EARLIER
POINT, THE COST SAVINGS OUGHT TO
MAKE IT MORE ECONOMICAL FOR
THOSE LOWER INCOME AND MIDDLE
INCOME FOLKS.

THANKS FOR YOUR WORK ON THIS.

>> THANK YOU.

>> I WANTED TO NOTE THE
DISPARITIES IN RACE AND CLASS
AND RESILIENCY.

OFTENTIMES THERE'S COMMUNITIES
THAT HAVE NOT HAD INFRASTRUCTURE
INVESTMENT FOR YEARS THAT ARE
THE FIRST ONES TO FACE NOT
ONLY -- NOT ONLY ARE THEY
VULNERABLE BUT PARTICULARLY IN
LEVELS -- ALMOST IMPOSSIBLE TO
BOUNCE BACK FROM HAVING DEALT
WITH FLOODING OR CLIMATE CHANGE
ISSUES.

I APPRECIATE YOU NOTING THAT IN
YOUR FINANCIAL ANALYSIS.

I WENT DOWN TO GULFPORT AFTER
HURRICANE KATRINA HIT AND THE
ENTIRE AREA WAS WIPED OUT.
NOBODY HAD THE FLOOD INSURANCE
AND THERE WAS NO INVESTMENT.

WE DON'T WANT THAT DISPARITY
HERE IN BOSTON.
SO AGAIN, I HAVE TO SAY THANK
YOU FOR BRINGING THAT UP.
I ALSO -- YOU WERE JUST ENDING
ON THE RETURN OF INVESTMENT.
IT'S KEY TO OUR FINANCIAL
ANALYSIS.
I HAD THE PLEASURE OF VISITING
WITH ONE OF THE HOMES HERE IN
BOSTON.
I THINK THE OWNER OR RESIDENT
MENTIONED THE ROI WAS 21% WITH
USING SOLAR ENERGY.
SO THERE'S A CERTAIN AMOUNT OF
NOT JUST RESPONDING BUT HOW MUCH
MONEY WE COULD LOSE IN TERMS OF
MONEY THAT WE COULD BE MAKING
AND GENERATING BY INVESTING IN
FUTURE THAT WILL PAY US BACK.
SO I -- DO YOU HAVE -- DID YOU
HAVE MORE COMMENTS ABOUT THAT OR
DOES YOUR ANALYSIS ON THE THIRD
INCLUDE MORE ROI ANALYSIS?
>> YES.
ON THE 13th.
>> 14th.
SORRY.
>> THERE'S A SECTION ON RETURN
OF INVESTMENT.
THE BUILDING LEVEL AT THE
DISTRICT LEVEL, THERE'S SOME
NUMBERS.
IT DOES HAVE TO BE SAID THAT THE
RETURN ON INVESTMENT FOR
RESILIENCE ISN'T NEARLY AS GOOD
AS FOR ENERGY EFFICIENCY.
THE CASE IS CLEAR FOR ENERGY
EFFICIENCY, THE HEAT YOU SAVE,
THE OIL AND GAS YOU SAVE.
FOR RESILIENCE, YOU MIGHT BE
SAVING MILLIONS DOWN THE ROAD IF
AND WHEN THE DISASTER HITS.
BUT THE WHY IS LESS CLEAR.
YOU SEE THE BENEFIT COST RATIOS
FOR THE PROPOSAL, MORE
PROPORTIONAL DEPENDING ON THE
INTEREST RATES.
SO THAT'S WHY THERE'S THE NEED
FOR THE VALUE CATCHER.
>> THANK YOU.
>> THANK YOU.
REMIND AGAIN, WHAT IS THE DATE
AND TIME AND LOCATION OF YOUR

LAUNCH EVENT?

>> APRIL 13 AT THE UMASS CLUB.
WE'LL HAVE

>> COUNCILLOR ESSAIBI-GEORGE.

>> I JUST -- TWO VERY QUICK
QUESTIONS.

I HOPE THEY'RE QUICK.

IN YOUR PRESENTATION, YOU DO
TALK ABOUT SELECTIVE INVESTMENTS
AND PARTICULAR NEIGHBORHOODS.

BUT IF WE'RE NOT LOOKING AT THE
WHOLE COAST OF THE CITY OF
BOSTON, THE NEIGHBORING TOWNS
THEMSELVES, DON'T WE PUT GREATER
PRESSURE ON THOSE NEIGHBORHOODS
THAT WE'RE NOT INCLUDE SOMETHING
SO WILL THAT FURTHER REPORT
INCLUDE, YOU KNOW, THE
COMMUNITIES OF DORCHESTER, HYDE
PARK AND INLAND?

>> SOUTH BOSTON IS WELL
UNDERWAY.

I KNOW THERE'S A REPORT ON
DOWNTOWN.

THERE'S OTHER NEIGHBORHOODS THAT
ARE AT RISK.

BUD MIGHT BE ADD TO ADDRESS
THAT.

THE PLANS FOR OTHER
NEIGHBORHOODS AND ONES EXPOSED
TO EXTREME PRECIPITATION AS
WELL.

YES, I THINK PEOPLE ARE WELL
AWARE OF THE PATHWAYS AND
UNEXPECTED PATHWAYS BY WHICH
WATER CAN COME IN TO OTHER
NEIGHBORHOODS.

>> I WORRY IF WE'RE PUTTING IN
SOME BARRIERS TO PROTECT A FEW
OF THE HIGHER IMPACT
NEIGHBORHOODS, THAT THAT PUTS --
YOU KNOW, WATER WILL FIND ITS
EASIEST WHATEVER.

AREN'T WE DOING THAT IF WE'RE
ONLY FOCUSING ON THE HIGH IMPACT
NEIGHBORHOODS AS OPPOSED TO
LOOKING AT IT MORE HOLISTICALLY?
SOME OF THE PUBLIC SPEAKERS
BEFORE HAD MADE THEIR COMMENTS
SPECIFIC TO THAT.

>> WE'RE NOT QUITE IN A
SITUATION WHERE WE'RE A BATHTUB
LIKE NEW ORLEANS AND WE HAVE TO
HAVE A WALL AROUND US AND A

BREACH

ANYWHERE WILL FLOOD THE CITY.
WE'RE NOT THERE YET.
MAYBE TOWARDS THE END OF THE CENTURY WE'LL BE GETTING THERE.
THE NEIGHBORHOOD APPROACHES MAKE SENSE.
YOU LOOK AT THE FLOOD MAPS.
THE FLOODING IS MOSTLY LOCAL.
YOU GET TOWARDS THE END OF THE CENTURY, IT'S COMING TO BOSTON AND HYDE PARK.
WE HAVE TO STAGE AS AN INCREMENTAL APPROACH, WE NEED TO KNOW ARE WE BUILDING TO TWO OR THREE FEET OR SIX OR SEVEN FEET.
WHAT RESOURCES DO WE COMMIT.
DO WE NEED TO RETREAT FROM MY AREAS.
IMPORTANT DECISIONS TO MAKE AS THE SCIENCE BECOMES CLEARER.
>> THANK YOU.
>> THANK YOU.
>> SO THANK YOU, PROFESSOR.
I'M GOING TO CONSOLIDATE.
I WANT TO ASK THE OTHER PANELISTS TO FILL.
IN WE'LL DO EVERYONE TOGETHER.
WE'RE GOING TO BE JOINED BY MAGEDALINA AND BUD, JAY AND RICHARD.
THEY'RE WITH THE BOSTON ARCHITECT SOCIETY.
>> CIVIL ENGINEERS.
>> SORRY MY NOTES ARE WRONG.
WE'LL HAVE ONE MINUTE FOR PEOPLE TO GET SETTLED.
SO EITHER JAY OR PETER YOU CAN START AND THEN WE'LL TAKE QUESTIONS.
>> I'M PETER RICHARDSON.
AIM CIVIL ENGINEER WITH OVER 30 YEARS OF EXPERIENCE OF STORM WATER AND FLOODPLAIN MANAGEMENT.
I'VE FROM AN ENGINEERING FIRM THAT PROVIDES STORM WATER PLANS INCLUDING FEMA AND BOSTON CITY AND WATER.
I'M A CERTIFIED FLOODPLAIN MANAGER AND A PAST PRESIDENT OF THE BOSTON SOCIETY OF CIVIL ENGINEERS.

I'M HERE IN THAT CAPACITY TODAY.
WE HAVE APPROXIMATELY 4,000
MEMBERS IN MASSACHUSETTS AND ONE
OF THE LEADING SECTIONS OF THE
AMERICAN SOCIETY OF CIVIL
ENGINEERS WHICH HAS
APPROXIMATELY 150,000 MEMBERS
WORLDWIDE.

FOR THE PAST TWO DECADES, THE
AMERICAN SOCIETY OF CIVIL
ENGINEERS HAS BEEN ISSUING A
NATIONAL INFRASTRUCTURE REPORT
CARD EVERY FOUR YEARS TO RAISE
AWARENESS ABOUT THE
INFRASTRUCTURE DEFICIENCIES IN
OUR COUNTRY.

THE LAST REPORT CARD GAVE THE
NATION'S INFRASTRUCTURE
ACCUMULATIVE GRADE OF A D PLUS.
ONE OF THE LEADING FACTORS IN
DETERMINING THE NATIONAL GREAT,
THE BUDGET GAP BETWEEN WHAT THE
NATION'S INFRASTRUCTURE NEEDS
ARE AND WHAT IS ACTUALLY BEING
FUNDED IN CONJUNCTION WITH THE
CURRENT CONDITION OF OUR
INFRASTRUCTURE.

WHILE THERE'S NOT A SPECIFIC
GRAD FOR MASSACHUSETTS, THERE'S
STATE AND FEDERAL DOCUMENTATION
THAT SHOWS A FUNDING GAP FOR
WATER-RELATED STRUCTURE IN THE
TENS OF BILLIONS OF DOLLARS.
THIS PAST FEBRUARY, I WROTE AN
ARTICLE CITE AGO STUDY BY THE
NATIONAL INSTITUTE OF BUILDING
SCIENCES THAT FOUND THAT EVERY
DOLLAR SPENT ON FLOOD
MITIGATION, \$7 IS SAVED IN
DISASTER COSTS.

THAT WAS ALLUDED TO EARLIER.
SO THINKING ABOUT CLIMATE CHANGE
AND THE RETURN OF INVESTMENT
FROM FLOOD MITIGATION, NOT
INVESTING IN MITIGATION PROJECTS
RIGHT NOW MAKES NO SENSE.
ESPECIALLY CONSIDERING WHAT WE
DESIGN TODAY WILL BE IN PLACE
THE NEXT 50 OR 100 YEARS.
WE'RE TALKING ABOUT THESE
SCENARIOS IN 2070 THAT COULD BE
3 TO MORE FEET.

THE INVESTMENTS WE'RE MAKING
RIGHT NOW ARE GOING TO BE IN

PLACE AT THAT TIME.

SO THE CITY OF BOSTON THROUGH ITS CLIMATE READY BOSTON PLAN AND THE GOVERNOR'S EXECUTIVE ORDER 569 WHICH CALLS FOR AN INTEGRATED CLIMATE CHANGE STRATEGY FOR THE COMMONWEALTH ARE FORWARD THINKING AND PROACTIVE FIRST STEPS TO MAKING BOSTON AND THE COMMONWEALTH MORE RESILIENT AND SUSTAINABLE TO CLIMATE CHANGE.

FOR THE PLANS TO BE SUCCESSFUL, THEY HAVE TO BE IMPLEMENTED. TO BE IMPLEMENTED WOULD REQUIRE INCREASED INVESTMENT THAT WILL LIKELY NEED TO COME FROM SOURCES OTHER THAN THE FEDERAL GOVERNMENT FOR THE NEAR FUTURE. I WANT TO THANK YOU FOR THIS OPPORTUNITY TO BE HERE TODAY AND I'LL TRY TO RESPOND TO ANY QUESTIONS.

I ALSO WANT TO OFFER THAT THE BOSTON SOCIETY OF CIVIL ENGINEERS IS THE OLDEST ENGINEERING SOCIETY IN THE COUNTRY.

FOUNDED IN 1848.

WE ARE HERE AS A RESOURCE FOR THE CITY.

VERY ACTIVE IN THE NATIONAL COMMUNITY AND WE'RE A RESOURCE FOR ANY CIVIL ENGINEERING QUESTIONS THAT THE COUNCIL MAY HAVE.

>> THANK YOU.

I'M SURE WE'LL HAVE MANY.

WE GO DOWN THE LINE.

>> THANK YOU FOR THIS CHANCE TO TEMPERATURE.

I'M JAY WICKERSHAM.

I'M AN ARCHITECT AND LAWYER AND THE CURRENT PRESIDENT OF THE BOSTON SOCIETY OF ARCHITECTS. WE ALSO ARE ONE OF THE LARGEST ORGANIZATIONS IN THE COUNTRY WITH 4,000 INDIVIDUAL MAYBES, 125 MEMBER FIRMS.

THE ENGINEERS HAVE 19 YEARS ON. WE WERE NOT FOUNDED UNTIL 1867.

LIKE THE ENGINEERS, WE VIEW OURSELVES AS A RESOURCE.

OUR MEMBERS ARE WORKING ON SOME

OF THE BEST PROJECTS AROUND THE COUNTRY AND AROUND THE WORLD. THAT'S EXPERIENCE AND EXPERTISE THAT WE'RE VERY INTERESTED IN SHARING WITH THE CITY AND ALL THE STAKEHOLDERS HERE. LISTENING TO THE OTHER TESTIMONY, I'LL KIND OF MODIFY WHAT I WAS GOING TO SAY. I THINK IT'S VERY ENCOURAGING TO HEAR HOW MUCH CONSENSUS THERE IS ON KEY ISSUES HERE. I'LL HIT ON A FEW POINTS AND THEN GO TO THE QUESTIONS. YOU KNOW, CLEARLY 2018 BE A YEAR OF ENORMOUS INFORMATION WITH THE SOUTH BOSTON STUDY BEING COMPLETED, THE HARBOR BARRIER AND THE GOVERNANCE STUDIES. ON THAT INFORMATION, THE DSA WOULD LIKE TO MAKE THIS A YEAR OF DECISION MAKING AND ACTION AND WHAT DO WE DO WITH THIS INFORMATION. THREE KEY POINTS I WANT TO MAKE. THE FIRST, AGAIN, AS OTHERS HAVE SAID, IS THE BUSINESS CASE FOR INVESTING IN RESILIENCY. WE'VE HEARD ABOUT SOME OF THE COST BENEFIT RATIOS. WE ALSO KNOW ABOUT THE COST OF INACTION. WHEN NEW YORK CITY WAS HIT BY HURRICANE SANDY IN 2012, THEY SUFFERED \$19 BILLION IN PROPERTY DAMAGE IN THE CITY ALONE AND 53 PEOPLE DIED. THOSE ARE THE COSTS OF INACTION THAT WE NEED TO OFFSET. ALSO, FROM THE BUSINESS PERSPECTIVE, NOT ONLY IS BOSTON THE ECONOMIC ENGINE OF MASSACHUSETTS, WE'RE AN EXPORT ECONOMY. THE EXPERTISE THAT WE DEVELOP AND THAT WE CAN DEVELOP HERE BY MAKING BOSTON A NATIONAL AND INTERNATIONAL LEADER IN ADAPTING TO SEA LEVEL RESILIENCY WILL GIVE RISE TO SKILLS AND EXPERTISE THAT ARE IN DEMAND WORLDWIDE. SO IN THAT WAY, TOO, THIS IS VERY MUCH AN INVESTMENT IN OUR

FUTURE.

I THINK THE SECOND POINT IS TO MAKE SURE THAT RESILIENT IS AN EXERCISE IN COMMUNITY BUILDING. WE HAVE TO BUILD UPON WHAT WE LEARNED ABOUT HOW TO MAKE A VIBRANT AND A JUST CITY.

WE'VE DONE ENORMOUS WORK IN BOSTON TO RESTORE AND RECONNECT WITH THE HARBOR.

WE'VE REPAIRED THE ECOLOGICAL SYSTEMS, WE'VE MADE THE HARBOR SWIMMABLE AGAIN AND WE MADE THE HARBOR WALK A TRUE PUBLIC MEETING PLACE.

SO AS WE LOOK AT RESILIENCY, WE NEED TO BUILD ON THAT.

WE NEED TO LOOK AT WHATEVER WE BUILD EQUALLY DEMOCRATIC MEETING PLACES AND NOT SYSTEMS THAT WALL OUT THE HARBOR OR THAT BUILD WALLS BETWEEN COMMUNITIES.

I THINK THAT TO THAT POINT, YOU KNOW, AS COUNCILLOR EDWARDS WAS JUST MAKING THAT POINT, ISSUES OF EQUITY NEED TO BE CENTRAL TO OUR INVESTMENTS.

GOVERNMENT INVESTMENTS IN PARTICULAR NEED TO BE TARGETED FOR THE COMMUNITIES THAT ARE MOST AT RISK AND MOST NEED THE HELP.

AND THE FINAL POINT IS THAT OF THE IMPORTANCE.

AS PART OF ANY THINKING ABOUT GOVERNANCE IS THINKING ABOUT REGULATION.

IN PARTICULAR ABOUT OUR BUILDING CODES AND ZONING CODES.

THESE ARE THE BASELINE, THIS IS WHERE GOVERNMENT SETS THE RULES FOR HOW TO PROTECT THE PUBLIC SAFETY, HEALTH AND WELFARE.

IT'S ENCOURAGING THE HEAR RICH TALK ABOUT THE WORK BEING DONE IN THE CITY WITH THE ZONING CODE.

THAT'S DOING TO BE CRITICAL.