



Resilience Meeting Minutes

Steering Committee

05 February 2018 / 8:30 AM - 5:00 PM / Auditorium Room, City Hall, 229 Main Street, Nashua, NH

Facilitators

Justin Kates, Nashua OEM, Steve Cauffman, NIST; Chris Poland, NIST, Liesel Ritchie, NIST

Agenda

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- 8:30 AM** **Host Welcome & Introduction:** Justin Kates, Nashua OEM
- Resilience Process Introduction
 - Overview of future meetings: long-term community goals, scope, planning horizon, expected outcomes, final products
 - Hazard Mitigation Process
- 9:00 AM** **Economic Development Brief:** James Vayo, Nashua Economic Development
- 9:10 AM** **Community Development Brief:** Sarah Marchant, Nashua Community Development

Working Sessions

- 9:30 AM** **Overview Resilience Process:** Steve Cauffman, NIST; Chris Poland, NIST
- Introduction to general Community Resilience Planning Guide process
- 10:30 AM** **Social Dimensions and Related Building Clusters:** Liesel Ritchie, NIST
- Characterize Social Dimensions and Related Building Clusters and Develop a draft list of Building Clusters
- 11:30 AM** **Lunch Break**
- 12:30 PM** **Introduction to Performance Goals for Building Clusters:** Chris Poland, NIST
- 1:00 PM** **Determination of Performance Goals:** Chris Poland, NIST

- Individual group sessions to determine Performance Goals for each functional category of Buildings Clusters

2:15 PM Findings Report out from working groups: Steve Cauffman, NIST

3:15 PM Next Steps for Overall Resilience Plan: Justin Kates, Nashua OEM

- Next Community Stakeholder Meeting: Topic & Location TBA
 - Census building for long-term community goals, scope, planning horizon, expected outcomes
- Review of project timeline and final products, and types of future meeting topics
- Update on National League of Cities (NLC) Resilience Integration Workshop

4:30 PM Closing Remarks: Justin Kates, Nashua OEM

Full Meeting Notes

Justin Opening Remarks

Group structure and expectations, this group will be the steering committee and is made up of industry experts who will be the liaisons.

Expectations:

- Not everyone can make every meeting but we want people to stay engaged as we work towards releasing the plan at the end of the year.
- Today: documenting questions that need to be answered so Anna and Justin can follow up and work it into the plan.

What is Resilience?

- Rockefeller NLC definition-> urban resilience.

Introduces chronic stresses which is not a typical facet of EM.

Resilience Dividend-> net benefits associated with absorption of shocks and stressors the recovery following a shock, etc.

Today's tools come through NIST and utilize the Resilient Design Performance Standard that was pioneered in Boulder, CO.

Importance of multidisciplinary, multi sector approach (community capitals framework).

Today we are focusing on social capital and built capital.

Building and Infrastructure Systems Resilience.

- Challenges like aging or damaged infrastructure apply here in Nashua like the roads after the winter.
- Focus on mitigation and functionality improvement before an event.

Greater Nashua's Existing Resilience Efforts

- tied together by leveraging these existing tools in this effort.
- useful for tracking improvements across the city.

Integrated Project Components

- Resilience Plan and Strategy-> Hazard Mitigation Plan-> Resilience Integration Workshop
- Pull the best planning efforts together for the most comprehensive plan

2013 Hazard Mitigation Plan to be updated due to 5 year update cycle

- Will follow FEMA requirements and be based on Local Mitigation Planning Handbook, etc
- Delivered to NH HSEM then accepted by aldermen for delivery in Q4 2018

NIST process includes adaptation and pre-disaster planning as well as looking beyond natural hazards and existing hazards/conditions

- Society saves \$6 for every \$1 invested in mitigation

Community Resilience Planning can help inform other planning

- Eversource critical facilities list
- Public Health preparedness messaging

Upcoming Resilience Projects

- Update Resilience Toolkit Website
- Climate Adaptation for HazMat
- COOP/CoG for the City (Q3 2018)

Utilizing NLC grant to host a workshop that aligns with the NIST standards (steps 2,3,4) and also use the DHS scorecard

James Vayo-> Economic Development Brief

- How ED relates to Resilience planning-> revolving and micro loan fund as well as brownfields clean up fund
- this money goes out to individuals to improve the city of Nashua (site clean up, start up loans)
- manages Business and Industrial development authority-> oversees special projects
- downtown improvement committee

Nashua-> significantly low vacancy for housing, lots of new housing projects

A lot of Nashua is reliant on single roads and traditional retail-> retail patterns are changing, traditional retail is vulnerable, Nashua is highly dependent on this

Sarah Marchant-> Community Development

- Many departments fall under the purview of this department
- Good because it ties everything together and does a lot of long range planning
- environmental and energy committee
- Riverfront Development plan to be implemented this year, 1000s of points of feedback
- 6 main ideas
- improve access to things like public downtown boat ramp and partnering with local businesses
- co-urbanize Nashua website has all community feedback from their work
- flood mitigation planning
- Sarah thinks this is a great opportunity for the master plan (20 years old) to be revamped and tie projects together (great back bone)

Steve Cauffman->NIST

Brought together consultants and technical experts as well as resilience fellows to help develop resilience process and plans and develop standards

We can't stop the hazards from occurring, what we can change is the trajectory of what happens afterwards

NIST started this process in 2014, think of communities as socio-technical systems

Many components that vary from place to place, buildings and infrastructure exist to enable economic development (live and work in these buildings)

Resilient communities recognize and mitigation consequences by making changes to building/infrastructure

Degradation of infrastructure is a slow moving hazard but does change performance over time

How do we measure performance gaps in regard to resilience?

6 Step methodology, utilizing a planning example (Riverbend)

Steve stated that Justin can make these available to the group

Guide Briefs provide additional guidance on these steps

13 online right now-> lessons learned and updates from research

Step One is to form a collaborative planning team which Steve says Justin and Anna have done a good job setting this up so far (community stakeholders at every level of public and private sector)

Focus of today is steps two and three-> Understand the Situation and Determine Goals/Objectives

Step Two (social capitals and social vulnerabilities)

-What functions are important to the community and where are the gaps? What dependencies exist?

NIST guide is unique because it recognizes that social needs play an important role in regard to built environment as well as recognizing the place of local government and social dependencies

Performance goals are indecent of the hazard, what should recovery times be (some things need to perform continuously)

Consider role of each facility (emergency operations, healthcare, etc)

These goals prioritize repair and reconstruction efforts

Performance Goals-> 30% start recovery, usual operations 60% (not excess capacity), full functionality (90%, excess capacity and ability to operate)

Performance levels-> (A,B,C,D) safe and operational, safe and usable during repair, safe and not usable, etc

These definitions are on the handout

Determine and characterize hazards

Evaluate hazards at three levels

1) Routine (frequent and with minimal disruption) 2) Design (level used to design buildings) 3) Extreme (maximum possible)

Prioritize solutions and develop implementation strategy -> this is where resilience dividend comes in

NIST has a tool (economic decision guide) that assists once planning gets to this point

Step 6-> Plan implementation and maintenance (incorporate Resilience Plan into Master plan and Hazard Mitigation Plan)

Chris Poland-> NIST

Deep dive into performance goal table

Document used to summarize everything in the plan and will be the link between everything in the plan

Later we will begin the process of actually filling out some of those

Explaining building clusters -> goal is to have people stay in the city and help in recovery as everyone works together to get the city back up and running

Anticipated performance of the whole cluster -> community focused planning (overall recovery times, critical mass)

Looking at a specific hazard you can evaluate resiliency to each type, also includes the actual risk

When looking at anticipated performance and comparing COOP it is important to look at the whole picture

Lots of questions during this section which is good, questions about the utilization of NGOs etc

Lisel-> NIST

Maslow's hierarchy of needs (what do we need to accommodate and achieve over a period time)

Identify and Characterize Social Dimensions

- Inventory institutions and contacts and who relies on each other
- Short and long term needs as well as potential growth

Understanding where strengths and capacities are is just as important as understanding gaps

Resilience planning inherently strengthens the existing networks of players in planning game and having people work together even more -> strengthens social capital

Does the planning team have the right data? do they have enough? Is it qualitative as well as quantitative? Has the data actually been analyzed by someone yet in the resiliency context?

Create a basic inventory of the social institutions (works closely with the built environment)

- Religious and cultural organizations as well as media organizations
- Need to consider communications in a hazard event
-

a media representative should be invited to the meeting, we need them in the room

Keeping track of involvement processes (who isn't here who should be here? What should be part of this meeting that isn't already)

Links between social institutions and building clusters (see powerpoint)

Built environment houses the social environment

Chris Poland-> NIST

Draw the link between the buildings and building clusters and the social institutions

When is each cluster and system needed for recovery? (Maslow)

"JIT" functionality goals -> making resources available as needed

What functions and services need to be performed and how do they tie in

Justin: Retail recovery in the community-> tie together to the extent that they support the neighborhood, there is a community recovery level and an individual level

Small business needs the most help and supports the neighborhood the most, larger businesses can help themselves

Nashua Critical Facilities and Emergency Housing slides (Created by Justin and edited by Chris)

Justin-> critical services (jail in Manchester) or things important to the community (large employers) that lie outside of Nashua.

Chris-> need to be included but maybe with an asterisk to note that their importance and implementation is different.

James Vayo-> Natural gas and other utilities that exist far beyond the reach of Nashua and ways to control and cope with these things and be more resilient (tailoring shelter in place operations)

Chris-> Things that are missing:

-water treatment/wastewater treatment

(page 4/5 in the book)

Second group under egress (airport)

Community recovery

Tables for clusters and hazards

What is critical? City hall gets closed down during snow storms, a good standard to judge things by, not really a critical facility in that case

Do we or do we not include regional partners? Secondary locations outside the city, regional services provided by locations in Nashua

Justin-> some of the terminology is based on NH licensing types and what types of services they provide in the state, tried to incorporate discussions with stakeholders (ex. Main street vs wall street businesses)

Bob Schiefle-> Question-> are the suggested parameters realistic (for setting performance goals)?

Answer-> Yes, they were developed using lessons learned from the SF earthquake and other earthquakes

One week to secure disaster and complete SAR -> Bob thinks this is an aggressive goal

Poland says it certainly up for discussion

(See spreadsheet for everything below)

Critical Facilities-> essentially all items at 90% within 0 days (Medical, EOC, etc)

Emergency Housing->renamed to emergency housing and services

Self-help housing-> single family homes, multi-residential, motel/hotel

0 Days at 90%

Medical housing-> where people live with med services provided, 90% at zero days

Skilled nursing-> very limited movement, level of care provided 90% at 0 days

Community shelters-> 60% at zero and 90% at one day

Services

Non-emergency medical

Emergency retail

(fueling stations)

(banks/ATMs)

Housing/neighborhoods/business->

Conversation over where emergency retail falls?

If USPS/UPS are operational then Amazon can still provide many services

Schools 30% @ 1-3 days 60% @ 1-4 Weeks 90% at 4-8 weeks

Discussion over where childcare should show up because of its effect on the economy especially if both parents work in an essential function

Community Recovery

Conversation about separating manufacturing out into two categories, one for items manufactured and distributed locally and items that are exported from the regional area, decision was made to keep manufacturing one category because most products manufactured here are shipped away and local products like dairy are more part of the food chain than manufacturing

Justin-> next step on refining this further is passing these lists along to the SMEs and having them evaluate the accuracy of what the groups agreed on. Do you need more time or less time to become operational based on your capabilities and the needs of your organizations

Fuel oil distribution included under fuel retail. There are no distribution facilities in Nashua but customers do need fuel

Mark and Justin-> what does the 90% within zero days mean for HC facilities? Is it emergency services or regular operations like ambulatory care and what about substance abuse treatment because people need continuous treatment (need a backup for getting their medication, anyone who gets federal funding is required to have a continuity plan)

Completely independent for 96 hours as per federal regulations (hospitals)-> Mark Hastings

Self-help housing adjusted to 60% at day zero because people can stay home for awhile but will then need help later (anticipated consequence)

Residential housing being considered as a fully functioning house this should be fleshed out further in the coming steps

James Vayo-> using NAICS to code what things actually are (tree system used to standardize definitions)

DHS infrastructure list does have a crosswalk to NAICS

Larger question-> what makes our community resilient? If we can't walk into stores and get what we need because it's manufactured in a different state are we really resilient -> Justin

Using NAICS codes you can establish an order of magnitude impact that a disruption will create in a given sector because that information is already available from the government -> James Vayo

Huge value of this program is giving the community the whole picture so they can see what is actually happening and what needs to change-> Chris Poland (people in Texas asking why their houses flooded)

Justin Closing Remarks

Bake resilience into our plans not create our own new ideas

What are we looking for as far as time horizon and goals for actual dates

Wants everyone to think about: what is one thing from your organization or discipline or program to make sure this resiliency plan is actually useful and meaningful so it is not sitting on a desk waiting for a 5 year update (examples: language, documents, maps, etc)

Next steps again: to meet with SMEs to ensure that what was discussed here today is accurate and correct

Providing information virtually-> email updates and a website to keep people engaged

Expectation that has not been completely confirmed: that the next meeting will be a larger, community stakeholder type meeting instead of the steering committee

NIST final remarks:

Steve: thank you and they are here to provide support but also learn from our work and practices because every community is different idea of resiliency is a lense that can integrate initiatives that are already in place.

Chris: use the guide, there is a lot of information in there about how the physical infrastructure systems integrate with the social and the resources and research available to construct these systems in a better way. This is a framework that was purposely written to be open ended and scalable and adaptable to different communities.

Lesel: sociological perspective is important, the communication and discussion was important and useful.

Justin: not usually the group that we have in the room so this is really going to change the planning aspect in a positive way.

NIST - Overview of Resilience Process

- Broad overview of NIST process (Steve)
- In-depth discussion of Performance Goals table (Chris Poland) from pg. 4 of Guide Brief.
 - Building Clusters will be independent of hazards (Phase 1 & Phase 2)
 - Long-term will depend on hazards (Phase 3)
 - Focus on performance goals today will be on: Phase 1 and Phase 2
 - Review of tables from p. 7 - 10 of Guide Brief 9
 - Summary Resilience Table will be for each hazard; and for each level of the hazards (level of hazard event)
 - Notes for doing analysis: need to do an GIS overlap analysis of different types (transit, water, building clusters, etc.)
 - Case Study: San Francisco, inspiration for NIST performance goals; example shelter in place.