

February 18, 2026

PBEM Community Preparedness Programs

Strategic Planning Status Presentation: “The Big Tent”

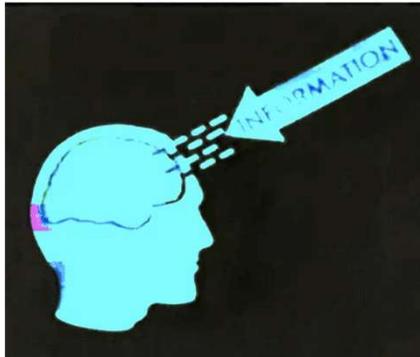


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Good evening everyone, and thank you for taking so much of your time to be here. This is an important presentation; tonight, I am talking about how we’re adjusting to the many changes taking place in the City of Portland, and where PBEM’s volunteer programming is headed as a result of those changes.

Strategic Planning Status Presentation: “The Big Tent”

- No plans to cut programming at this time (in fact, we have new opportunities)
- We have to manage the programs we have with fewer staff
- Nothing presented on tonight is happening right this moment



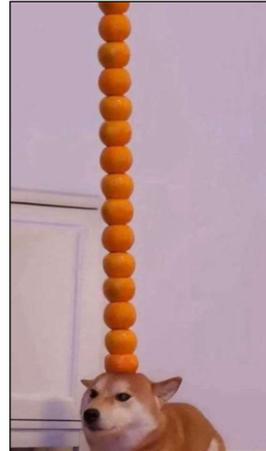
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I want to say out of the gate that at this time, there is no plan to cut anything we aint already cut. That’s not what this presentation is about. But actually, the growth of our programming and changes in Portland government are presenting new opportunities for how all the gears work together in our office.

I also want be very clear: I am presenting on changes to our programming for the near future. There is no expectation that you go back to your teams after this presentation and take immediate actions. Everything you’ll hear about tonight will be set on timelines that I intend to be transparent about.

Strategic Planning Status Presentation: “The Big Tent”

Photos of actual PBEM employees

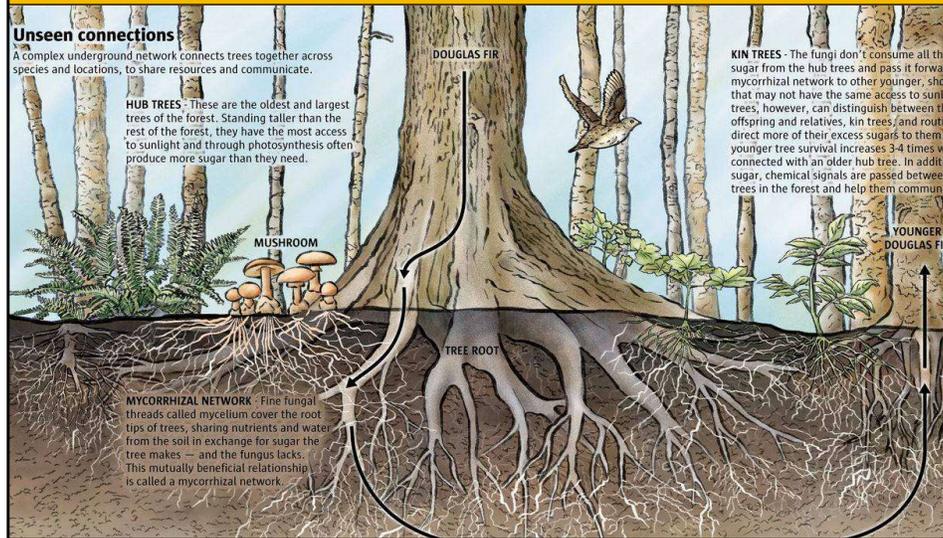


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I will say, however, that all our programming DOES need to be manageable by the staff we have available at PBEM. Right now we are three and a half employees on the Community Preparedness Team and we have more work than we can reasonably do. I'm not whining about that; the point is that if we're juggling too many chainsaws, we start losing chainsaws. One of my favorite aphorisms is "If you chase two rabbits, you will lose them both". We're chasing a couple dozen and we need to fix that.

But that doesn't necessarily mean cuts. It means scaling our programs to be manageable.

A Community Resilience Ecosystem in Portland



To that end, I want to introduce this concept of a community resilience ecosystem. It's a theme I plan to come back to over the course of this presentation. Here's what I mean by that: as you know, we have many discrete programs that don't necessarily interact or gel together. NET, COAD, BEECN...they've been siloed, to use a trite term. But that was never the plan. Those programs were never intended to stand alone by themselves. These programs are trees we deliberately planted close together. But carrying the tree metaphor forward, we've learned some funny things about trees lately. Trees do not stand alone in a forest, but have these crazy interconnections with fungi and animals that contribute to a healthy, **decentralized** network of resilience. We're even finding that trees use chemical channels in that network to communicate with each other. Botanists call it "the **wood wide web**". And trees talk with each other about things like pest attacks, droughts, and even to send nutrients to other trees that are struggling.

Big Tent Presentation: Presentation Objectives

- Describe PBEM Community Resilience Team's (CPT) strategic planning process
- Get volunteers up to date with CPT program offerings and link them together
- Discuss PBEM's plan for merging NET and BEECN

And most importantly, what does this have to do with you and the community you serve?

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Let me go over the intention of this presentation.

First, I want to introduce our team's strategic planning process.

Then I'm going to run through all the community program offers we have at PBEM right now...the "trees" in our forest. And, how we intend that those programs network together more.

Finally, I want to hold some time to talk about why and how we plan to merge the NET and BEECN programs.

This should all come down to actionable information you can use to improve resilience in your communities, and to take your teams in the direction you want it to go.

Chapter 1: The Strategic Planning Process



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So let's get into it.

Chapter one: the strategic planning process. So yeah strategic planning...why bother?

CPT Strategic Planning



Strategic Planning Group includes:

- PBEM CPT staff
- Friends of Portland NET
- COAD members
- Mr. Ernie Jones

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The idea of a strategic plan is to plant resources into efforts that equal a greater sum than its parts; AND, does so in a way that is organized and directed. We stay focused on goals, and: what we *DO* as an organization, and how we use resources, should reflect our strategy.

Our previous leader, Shad, directed me to kick off a strategic planning process specifically for the Community Preparedness Team in early 2025. We've met eight times so far and will probably need to meet at least three more times. The Strategic Planning Group includes myself and everyone on the Community Preparedness Team, NET representation from Friends of Portland NET, representatives from the COAD, and BEECN manager emeritus Ernie Jones. It's a good group.

CPT Strategic Planning: Vision/Mission/Values

- **VISION:** Portlanders lead, support, and collaborate with one another to prepare for, adapt to, and thrive after disasters, with a focus on ensuring that no community is left behind in our city's resilience future.
- **MISSION:** To strengthen community resilience by fostering inclusive networks, co-creating accessible preparedness programming, and building long-term partnerships that empower everyone who lives, works, plays, and worships in Portland.

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For the PROCESS, we began by articulating our mission, vision, and values. The vision is: “***”

And our mission: “***”

We do have values, but there are too many to put on a slide. You can read them on the strategic planning wiki page I sent to this group as a “read ahead”.

CPT Strategic Planning: Program Offerings

- Neighborhood Emergency Teams (Portland NET)
 - NET Unidos
- Basic Earthquake Emergency Communications Nodes (BEECN)
- Community Organizations Active in Disaster (COAD)
 - COAD response network
 - Community Training Initiative
- PBEM Small Business Outreach
- PBEM Speakers Bureau
- Youth Programming

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The point of this exercise isn't just to sound cool to grant funders. A vision, mission, and values are both the underlying premises of what we do; and all that we do **flows** out of our vision, mission, and values. Once our strategic planning group made it through that part, we began parsing out what are all the programs we offer through the community preparedness team? We realized we have quite a few, and only three and a half employees to manage them all. And here they are: Portland NET, BEECN, the COAD, Small Business Outreach, and the Speakers Bureau. Youth programming is really more in the parking lot. When Da'Von left PBEM and we couldn't rehire his position, we dropped all of our youth programming.

[[CLICK]]

My hope is that PBEM can engage in youth programming again in the future. But under our current staff capacity, it's not possible and we're asking school districts to run that show. From this point, I'll hit the highlights of the last three programs,

[CLICK]]

and then we'll dive into NET and BEECN since the focus today is really on the future of NET and BEECN.

Program: Community Organizations Active in Disaster (COAD)

- Networks of community-based organizations (CBOs) preparing for disasters
- A branch of the COAD, called the COAD Response Network, is getting involved in response roles
- Through the COAD, we are also providing life safety classes.



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COAD is a program that many of you probably already know about. COADs are common throughout the United States, and we started ours in 2018. Regina on our team is the program manager, and we've been building this program *slowly*. The relationships take time to cultivate. We activate the COAD network to provide the communities served by COAD partners with information about what's going on and how to receive resources if needed.

We have a branch of the COAD that started in the middle of last year, called the COAD Response Network. These are CBOs with a role in disaster **response**. They include partnerships with organizations like Team Rubicon and Meals on Wheels People and a few others. Again, growth here is slow, but we're building important networks. We're also using the COAD network to propagate life safety training such as First Aid, CPR, AED, and Stop the Bleed in communities underserved by government.

Finally, right now, we're evaluating ideas that would put some COADs into the BEECN network. I'm also inching to a place where we can ask COAD partners to team with their local NETs on earthquake preparation and response. I would say those plans are still aways away, however.

Program: Small Business Outreach

Building a network of Portland small businesses to get prepared with Continuity of Operations Planning (COOP)



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More immediate is what we're working on for local small businesses. Regina is also the program manager for this because the work she's doing here is very similar to COAD: building networks. Portland City Council asked us to take this one, and we only started late last year. Unlike with the COAD, I'm expecting NET and BEECN will be linked to this work pretty soon. We're developing materials intended for NETs to hand out to local businesses to get prepared, and to get involved.

Program: PBEM Speakers Bureau



Volunteers trained to provide public education around disaster prep

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OK, last of the programs I want to hurry through. We have the Speakers' Bureau, and these are volunteers who engage in public information by speaking at neighborhood meetings and events. I think all of the volunteers who are Speakers' Bureau volunteers are NETs, so many of you are familiar with this. When we get an email from a neighborhood association asking for us to present, we farm it out to this group. This is not a labor intensive program for us; Glenn has it nearly completely automated, and the return on investment is very high. It's the community engagement part of what we do. If PBEM did this without volunteers, we would need to add three or four more full time staff at PBEM.

Portland NET and BEECN: Policy Drivers



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Alright, let's go into NET and BEECN. To set up, I want to bring up some of the ***policy drivers*** for these programs, and these are also listed on the Wiki page. We don't make decisions about program organizing and policies in a vacuum, or change the program because we're bored. We do what we do in response to environmental scans of the state of disaster preparedness in Portland. For NET, here are the important things. I want to point out...this is not an exhaustive list, I'm covering only the policy factors that feed into today's presentation:

Policy Drivers: All Hazards Responders

We are an all hazards emergency management organization.



First, we are an ALL HAZARDS emergency management organization. This is important to note because the impetus of creating NET in the 90s was the prospect of a Cascadia Subduction Zone earthquake. That's still a threat and we still need NET for that purpose. But over the decades, we have never **once** deployed NET volunteers to respond to an earthquake. Meanwhile, climate change and other hazards are driving a lot of our deployments.

Policy Drivers: All Hazards Responders

| Deployment Causes, 1996 - present | | |
|-----------------------------------|-------------------|----------------------|
| Activation Cause | # Events | Est. Volunteer Hours |
| Total | Sum 321 | |
| Inclement Winter Conditions | 81 | 3,096 |
| Planned Event | 70 | 3,771 |
| Inclement Summer Conditions | 53 | 2,394 |
| Pandemic | 44 | 20,433 |
| High Winds | 22 | 508 |
| Program Service | 22 | 438 |
| Flooding/Urban Pooling | 10 | 860 |
| Fire/Wildland Fire | 7 | 932 |
| Utility Emergency | 5 | 143 |
| HAZMAT | 4 | 139 |
| Civil Unrest Related | 2 | 292 |
| Technological | 1 | 32 |

Have a look at this. This table tracks every NET deployment we know of, from 1996 to today. Left column is the TYPE of incident NETs deployed for. Middle column is the number of times we deployed NETs for an incident like that, and the right column is the estimated volunteer hours for incidents of that type. Planned events are things like the Rose Festival, so that's up there pretty high. But factor that out, and the number one reason we deploy volunteers is for extreme weather.

The program policy response here is not to choose WHETHER we develop volunteers to deploy for climate emergencies OR for earthquakes, but to be ready to respond to BOTH. Both the climate change disaster and the earthquake are very high impact, but climate change is relatively slow moving compared to an acute earthquake response. So the two require different response postures.

Policy Drivers: Organizing Into Teams

From PBEM's perspective, the only reason for organizing NETs into geographic-based neighborhood teams is to respond to an earthquake.



NEXT: we organize volunteers into teams. But why? In the history of the NET program, volunteers have only ever deployed under PBEM's direct guidance and management, with PBEM effectively serving as the "incident commander" for responding volunteers. Simple example: power line goes down, Portland Fire asks for NET help with the perimeter, Glenn or I get on the deployment system and ask for some available NETs. What we DON'T do is send an all call to 1,300 NET volunteers to deploy to your staging areas, set up command, and manage the downed powerline.

Policy Drivers: Organizing Into Teams

From PBEM's perspective, the only reason for organizing NETs into geographic-based neighborhood teams is to respond to an earthquake.



No anticipated disaster would call for that, in fact, **except** for an earthquake. In that situation, it makes sense for NETs to come together as neighborhood teams to organize and respond.

This implies that the organization of NETs into teams should center around their response to an earthquake.

An earthquake is the ONLY disaster we can think of where it would make sense for NETs to come together as a responding, OPERATIONAL team *independent of* PBEM. That might not be the only reason to organize NETs into neighborhood teams. But an earthquake is the only reason we would need teams during a ***response; during grey skies***. Again, for all other emergencies, PBEM is the incident commander and NETs would fall directly under our chain of command. We don't need you structured as a neighborhood team to respond to a down powerline, or to volunteer at a shelter, or to help inspect one of Portland's levees.

Policy Drivers: Organizing Into Teams

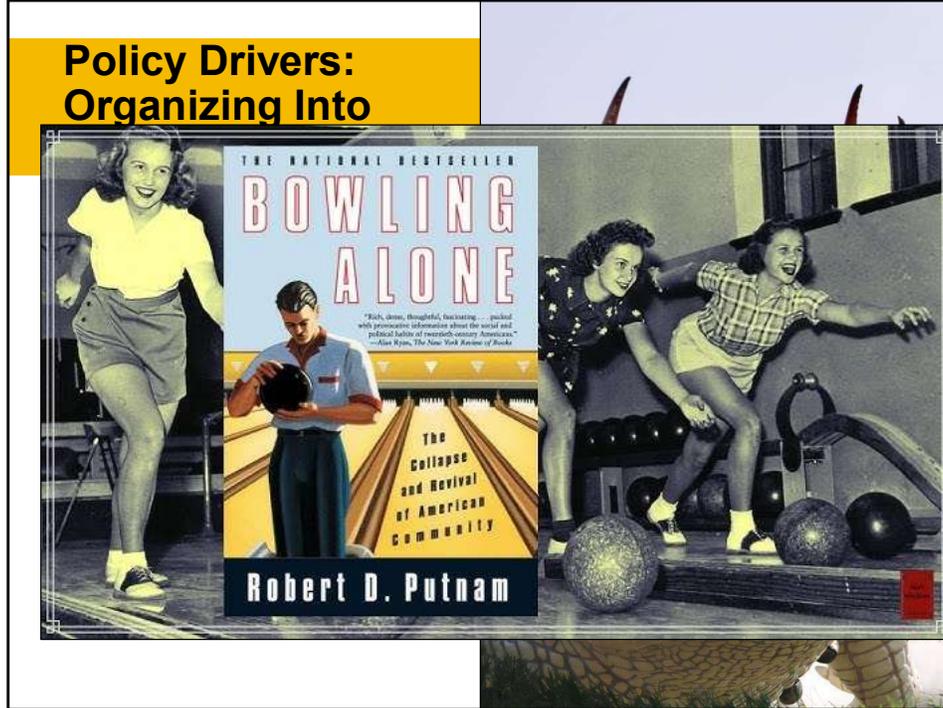
1. Tradition!



So I ask again: why do we organize NETs into teams? After working in this space for 13 years, I've found many answers to that question. But the three that turn up the most and that we have to acknowledge are:

First, it's just the way we've always done things. Organizing into a team is what the FEMA CERT curriculum has told us to do since 1994 and we've never really questioned it. And teams make sense for who the CERT curriculum was really designed for: rural and suburban communities, not urban communities. But that's OK, because there are still two other reasons we do it in Portland.

Policy Drivers: Organizing Into



Here's the second reason: NET isn't just about responding to a disaster, it's about community resilience. Meeting together as a community and knowing your neighbors contributes to the mission of community resilience. A lot of great research backs this up, in fact.

[[CLICK]]

If you ever want some not-light reading or you're having trouble getting to sleep, I encourage you to tackle Robert Putnam's landmark book and part time doorstop: *Bowling Alone*. It was first printed 25 years ago but his exhaustive research on why community togetherness is important still holds up very well.

Policy Drivers: Organizing Into Teams

1. Tradition!
2. Meeting together socially improves community resilience
3. Teams are the best way for communities to respond after an earthquake.



And that matters for the third reason we meet as a team, which I've already talked about:

We will need neighborhood-based teams to respond in the aftermath of an earthquake. The City will not be there to help you for at least three days and probably longer. The neighborhoods will be the front line. And that means: PBEM sure as HELL better get you ready for that. Helping NETs be ready for that role **right now** is, in fact, how we are responding in the aftermath of the earthquake that hasn't happened yet. If you want to see what PBEM is going to do after the earthquake, you're looking at it. If I have succeeded in doing my job, I won't be shoulder to shoulder with you after the earthquake searching through the rubble. You'll be doing that with your neighbors because we prepared you ahead of time with the training and confidence needed to do that.

Policy Drivers: Not Everyone Can Be or Wants to Be a NET



Not everyone has time to be a NET volunteer, but everyone has a part to play in their community's disaster resilience.

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Next policy driver: Hypothetical question, So if we accept that after an earthquake NETs are going to be leading the search and rescue charge in their neighborhoods, do you think your NET volunteers are going to do it alone, all by yourselves, without your non-NET neighbors helping?

I would say not. You're going to have lots of neighbors who want to help. You should be ready to direct and manage the ones who want to be part of your response effort.

Yet becoming a NET volunteer takes 28 hours of basic training and a minimum 12-hour annual commitment. Our program is great, but that is not accessible for most people. And even if it were, there's another problem. At last count, I saw nearly 3,000 applicants to the NET program in our system and that number is rising. Glenn graduates about 250 a year. The volunteers that graduate come from every corner of the City. That point in particular is going to come back later.

Program Concepts

1. Blue Skies vs. Grey Skies
2. Operational Period
3. Three frameworks for managing a NET Team:
 - Traditional NET (neighborhood association)
 - Community Resilience District (CRD)
 - Block-to-Block Organizing (NERF)
4. NETs/ATVs/SUVs
5. Volunteer Support Functions (VSFs)
6. NET Earthquake Plan

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OK, those are the Policy Drivers relevant to our discussion tonight. We're now getting into the changes we're putting forward for NET and BEECN. To do that, let's review a few program concepts. None of this is new; these are all ideas we've developed in response to what NETs have told us they want, or they are ideas native to Emergency Management. What's missing is how all these concepts click together.

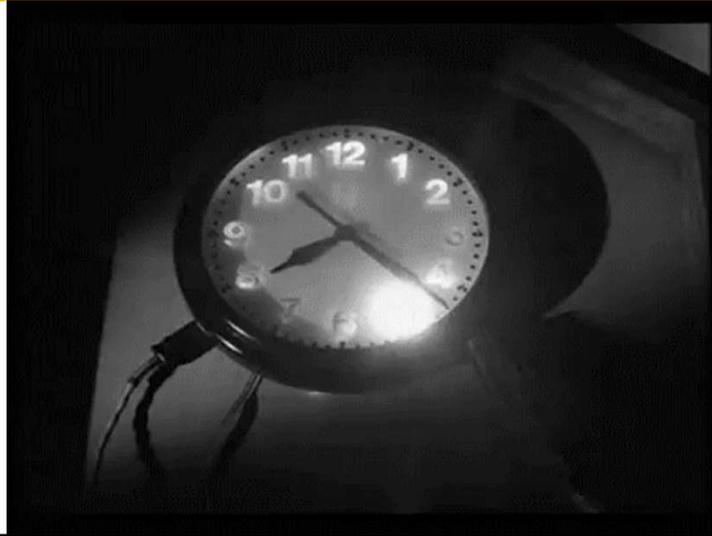
Blue Skies vs. Grey Skies

BLUE SKY DAYS VS GRAY SKY DAYS



First: blue skies vs. grey skies. What does this mean? [[***]]

Operational Periods



Next: What's an Operational Period? [[***]]

Team Organizing Frameworks

Traditional NET

Community Resilience
Districts (CRDs)

Neighborhood Earthquake
Response Frameworks

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Next: since 2013, most NETs have organized their teams by neighborhood association. Over the years we've introduced two other frameworks for organizing a team: Community Resilience Districts and hyperlocal, block scale organizing...what we are tentatively calling "NERF", but stands for "Neighborhood Earthquake Response Frameworks". I'd like everyone to think of these three frameworks as distinct. If you're a team leader, you are managing EITHER a Traditional NET, a CRD, or a NERF. We're going to tackle that in more detail later in the presentation.

NETs/ATVs/SUVs



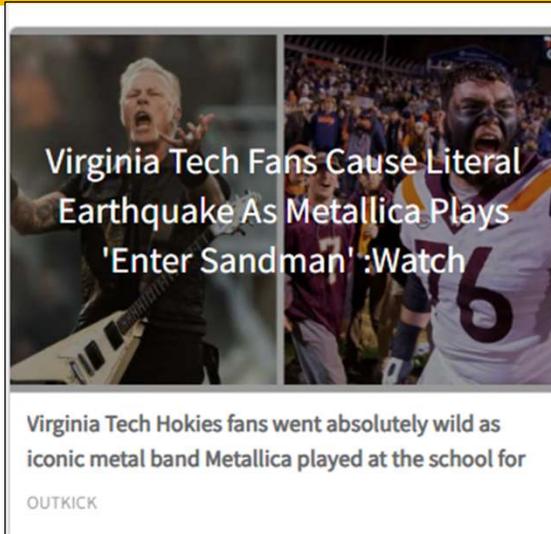
Before we do that, I want to review that we have three types of response volunteers in our programming: NETs, ATVs, and SUVs. NETs are any volunteer who have completed NET basic training and are in good standing as a NET volunteer. What's an ATV, and what's an SUV? [[***]]

Volunteer Support Functions (VSFs)

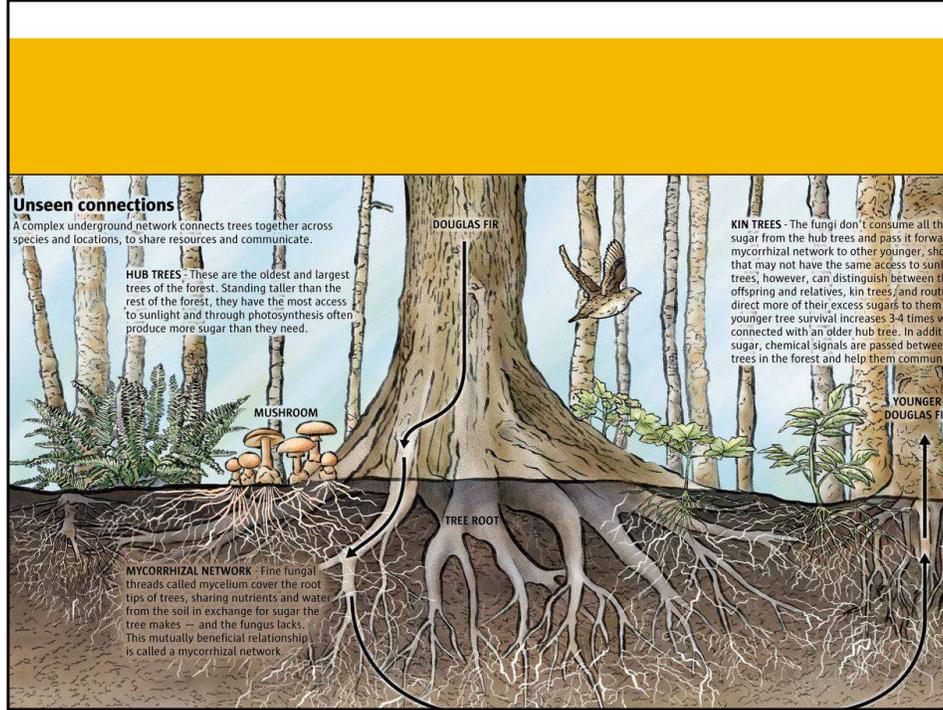


We'll later get into Volunteer Support Functions, or VSFs. A preview: a VSF is a framework for developing **individual volunteers**. So Traditional NET/CRDs/NERFs are frameworks for how a **team** is organized, and VSFs are frameworks for how individual volunteers are developed.

~~NET Operations Plans~~ ~~NET Earthquake Plans~~



One last summary before we do the deep dive: Earthquake Plans...we introduced the concept of Operations Plans in 2013, but we've realized since then that Operations Plans are actually Earthquake Plans.



OK, all those policy drivers and concepts we just reviewed, let's start bringing it all together.

Team Organizing Frameworks

Traditional NET

Community Resilience
Districts (CRDs)

Neighborhood Earthquake
Response Frameworks

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We're moving towards a future with this program where if you are considered an active Team by PBEM, you are working on an Earthquake Plan.

What I just said there is significant. You're going to start to see a philosophical shift with this program from "Just organize yourself into Teams for whatever reason" to "Organize how you want, but a team recognized by PBEM has at least the *beginnings* of an Earthquake Plan". I'm going to talk later about how I'm developing a template for those. But one of the first questions your Team Leader will be asked on that template is: under which of these three Frameworks are you choosing to organize your team? It can be any one you want, and the choice is not permanent. A team can decide to organize under a different framework whenever they want.

Team Organizing Frameworks

1. A team has a Service Area.
2. A team has a Team Leader during Blue Skies.
3. A team has an Earthquake Plan.

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Each of the three frameworks have these three important things in common:

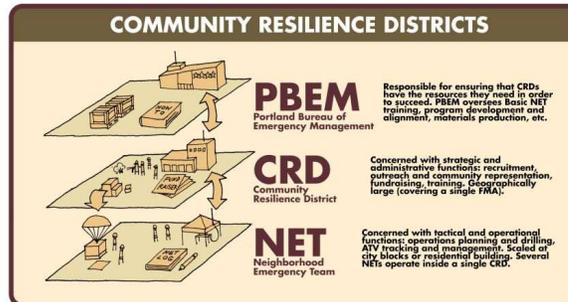
1. A team has a Service Area. To put it crudely, that's the territory on a map that a Team is claiming and saying to PBEM: we're working on an earthquake plan in **that** area. It essentially becomes "your turf".
2. Second, a team has a Team Leader actively managing the team during Blue Skies. However, that Blues Skies Team Leader does not need to be a trained NET. They can be an ATV.
3. And third, a team has an Earthquake Plan, which sets response preparation goals for your community and contributes to PBEM's common operating picture.

model. It's also not clear if we have access to the GIS resources that would be needed to pull this off.

On the Blue Skies/Grey Skies dichotomy, blue skies community organizing is hyperlocal, which is to say block scale, and grey skies disaster response is also hyperlocal.

Team Organizing Frameworks: Community Resilience Districts (CRDs)

- **Blue Skies**
organizing is geographically broad
- **Grey Skies**
response is geographically hyperlocal

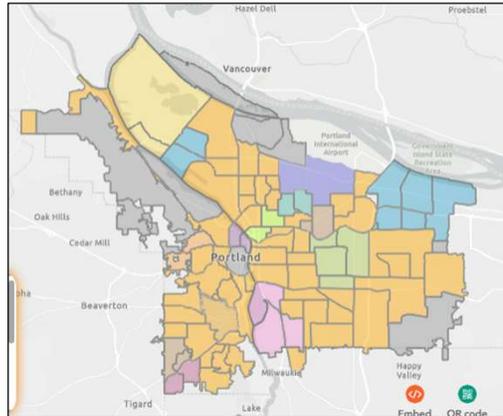


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Next up is the Community Resilience District, or CRD. This is practiced in St. Johns and Northwest Heights. It's a concept we came up with just before the COVID pandemic. This is a whole community approach, intended to integrate ATVs into highly organized Blue Skies roles. The idea also incorporated what you saw in NERF: block scale response during grey skies. So under this model, community organizing during Blue Skies is geographically broad but Grey Skies disaster response is hyperlocal and broken into block-scale teams.

Team Organizing Frameworks: “Traditional NET”

- **Blue Skies**
organizing is geographically broad
- **Grey Skies**
response is geographically broad



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A traditional NET is the type of team almost all of you are in. Your service area boundaries conform to neighborhood association boundaries, and often, a single team incorporates more than one neighborhood. Team sizes tend to be small...on average, I would say about a dozen really active volunteers and maybe three to five ATVs.

Right now, we have 48 teams spread over 72 neighborhoods. Two of them are CRDs, none of them are NERFs. So I really want to focus on the Traditional NET framework for the next slides. I want to say real quick that none of the three frameworks are “better” than another. The framework you choose should reflect what you want to accomplish in your community and the resources available to you. It’s just that the significant majority of you have stuck with the traditional model, so here we go.

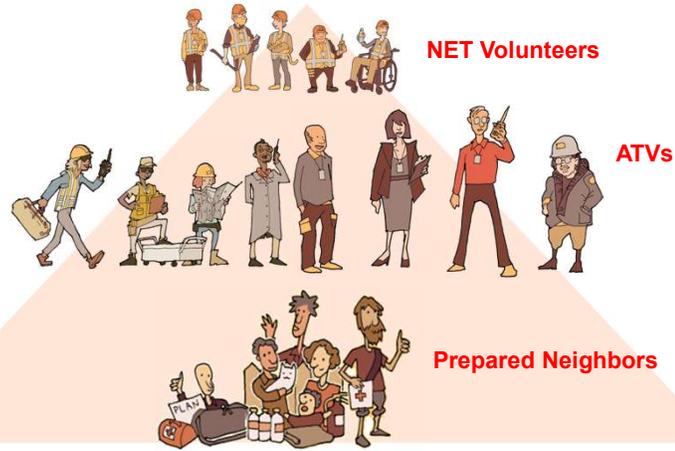
Team Organizing Frameworks: “Traditional NET”



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When I talk with most NET leaders about their response strategy, this is often what I’m hearing people plan for. NETs and maybe a small group of ATVs will respond to neighborhood survivors. This approach is illustrated in a conversation I had over email with a Team Leader last week. He was concerned over the **ratio** of NET volunteers to neighborhood residents. And that’s good forward thinking on his part. We talk in the same terms about ratio of patrol police officers in precincts, or ratio of firefighters to residents in a fire management area. Those ratios are important because it helps City administrators evaluate risk for singular public safety events, like a robbery or a house fire. But we’re gearing up to respond to an earthquake: an extremely high impact regional disaster. If you are thinking of how to structure your NET team, ratios of fully trained NETs to residents in your neighborhood is not the way to go. I would not say that ratio is irrelevant. But it answers the wrong question about how you structure your teams to be an effective response force.

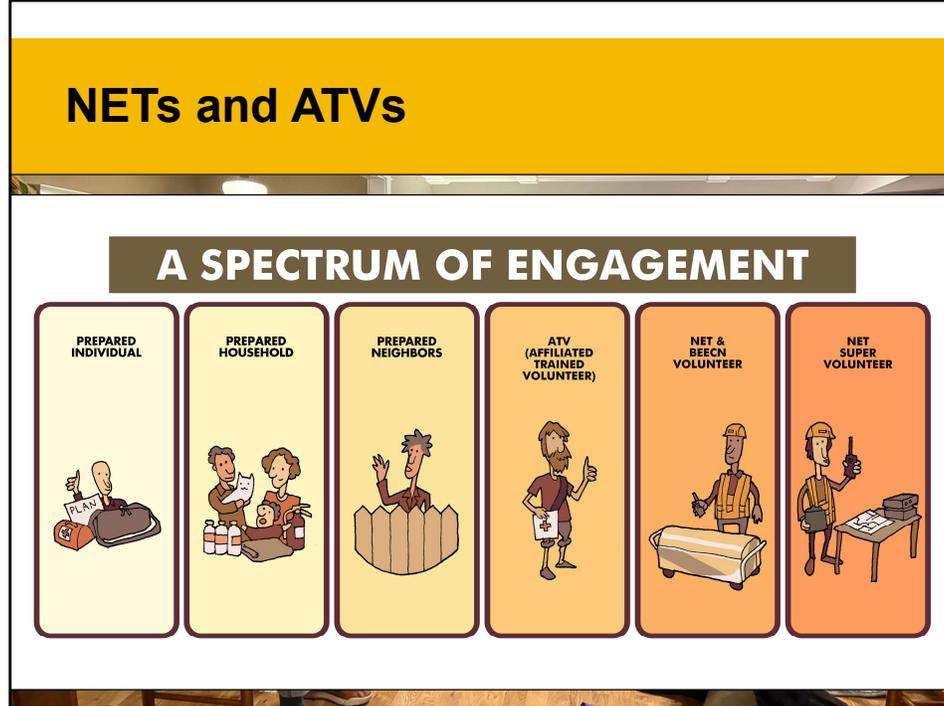
Team Organizing Frameworks: “Traditional NET”



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This is ACTUALLY how we recommend you plan. Trained NET volunteers as the command and control part of a neighborhood-based response system. You are the **top** of a chain of command. Beneath you are a broad base of ATVs. And everything is backstopped by neighbors in your service area who are neither NET or ATV, but are at least prepared in their homes for a major earthquake so they are less likely to need your help, and more likely to be SUVs. So let's not think of your ratio of NETs to residents. Let's think of your ratio of earthquake prepared households to unprepared households. That is the ratio that will matter the most. Having a lot of trained NETs on your team is a fine thing. But in a resource environment where we can't train thousands of NET volunteers, instead, think about how many ATVs you have. That's the sweet spot.

NETs and ATVs



To reiterate: **don't wait for scores of trained NET volunteers to join your team. Do not rely on that.** A few slides ago I pointed out that PBEM can only graduate 250 NET volunteers a year, and our average attrition is 100 a year. So that means we only grow by 150 trained NET volunteers annually. If I could hire another staffer, I could raise that to 350. And that still wouldn't hit the NET to resident ratios you might be hoping for.

[[CLICK]]

Instead, build strong ATVs. That's the middle of your pyramid. And a strong contingent of ATVs will help you more easily accomplish the base of your pyramid, which are your prepared neighbors.

There are creative ways we can help you bring ATVs into your team. For example, we can use the Neighborhood Association system. We also got this new form of government where your representatives are your neighbors. Several of them have already approached me and told me that they will use their neighborhood bullhorns to send more troops to you, we only need to ask.

But I've asked them to wait on that, because not very many teams are ready for it. My challenge to every team represented here is to have an onboarding plan for ATVs. You tell me when you want me to try and get you more ATVs. When you're ready, they'll contact you, you share team meeting times, your earthquake plan, find out which VSF

they want to be part of. Then let's get them trained into those roles.

VSF: ARO example

VSF 02.02: Fire Station ARO

A Volunteer Support Function (VSF) is a functional area under which volunteers carry out their responsibilities. Each VSF is broken into position assignments. VSF 02.02 is the position assigned to volunteers who are trained and ready to operate the amateur radio Orange Go-Kit at a Portland fire station. This is usually, but not always, done in service of the BEECN program. They are considered a BEECN volunteer and listed in BEECN volunteer rosters.

See also: BEECN Program Guidelines

| |
|--|
| Contents (print) |
| Summary |
| Related Volunteer Positions |
| Responsibilities |
| Training for VSF 02.02: Fire Station ARO |
| VSF 02.02: Fire Station ARO Knowledge Base |



Summary [edit | edit source]

BEECN volunteers operate in organized cohorts, perform regular equipment checks, participate in drills, and deploy communication nodes (BEECN) 24-48 hours after a major earthquake. Since BEECN caches operate on handheld UHF radios, they cannot talk directly with the Portland EOC. The fire station nearest to a BEECN cache serves to relay radio traffic to the EOC through use of a VHF radio set, called an Orange Go-Kit. Fire Station AROs operate that go kit.

BEECN Volunteers are the only PBEM volunteers who can be a NET volunteer or an ATV but are **indemnified** by the City of Portland either way.

Blue Skies/Grey Skies Summary

| During Blue Skies, these volunteers... | During Grey Skies, these volunteers... |
|---|--|
| stay in contact with their BEECN Coordinator, participate in BEECN equipment checks, exercises, and inventories. They monitor the BEECN readiness source for their assigned fire station. They keep on top of their radio skills, and stay in contact with the captain and/or lieutenants at their assigned fire station. | ...deploy to their assigned fire station, set up the radio, and facilitate radio traffic between their BEECNs and the EOC. |

Related Volunteer Positions [edit | edit source]

- VSF 14.01.02: BEECN Coordinator
- VSF 14.01.03: BEECN District Coordinator
- VSF 14.01.04: Fire Station UHF Volunteer
- VSF 02.02: Fire Station ARO

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Take this VSF position description, one of our better developed ones: VSF 02.02: Fire Station ARO. If your team decides you want the capability of having a an ARO at your nearest fire station, this position description explains how you develop that volunteer so they can be a capable and functioning amateur radio operator ready to deploy to a fire station and begin passing radio traffic. I'm going to go to the VSF page and talk about how the volunteer position descriptions are structured.

But before I do that, please keep in mind that in emergency management, a fully developed resource has three things: the appropriate training, experience, and equipment. The training and the equipment part are straightforward. In this example, you train the ARO on amateur radio and you make sure they have access to an amateur radio set. But what about experience...how do you get that, and how do you demonstrate you have that experience?

[[***]]

Alright, let's go through the page. The example you're seeing is the template I am using for all volunteer position descriptions.

Responsibilities [edit | edit source]

- Deploy to assigned fire station within 24–48 hours following a major earthquake.
- Set up radio equipment at the fire station. Commence operations as described in *Fire Station Operations* in the BEECN Guidelines.
- Relay and log emergency messages between the public and emergency responders via radio.
- Conduct periodic checks and inventory of the Orange Go-Kit to ensure readiness.
- Participate in scheduled training, drills, and activation exercises to maintain operational competence.
- Represent PBEM professionally and follow safety and operational guidelines at all times.
- Log all volunteer hours.

| Position ID | VSF 02.02: Fire Station ARO | | |
|---------------------------------------|---|----------|----------|
| Mission Area | Preparedness | Response | Recovery |
| Lead Agency | Portland Bureau of Emergency Management | | |
| Active NET Required? | No; this position is available to ATVs. | | |
| Structure | The fire station ARO is part of a BEECN Cohort, and the volunteer reports to the BEECN Coordinator for their assigned fire station. | | |
| Relevant Knowledge, Skills, Abilities | Operating a VHF amateur radio set. Ability to remain cool headed in intense situations. | | |
| Licenses and Certifications | Technician class amateur radio license in good standing. Higher classes of amateur radio license (e.g. General or Amateur Extra) encouraged. Once licensed, volunteer must then be certified as a PBEM Amateur Radio Operator (ARO). | | |
| Currency | Volunteers must be in touch with their BEECN Coordinator and appear on the roster of their BEECN Response Framework. They should also participate in inventories and exercises as their time allows. Because all BEECN volunteers are indemnified, they are required to log their hours but not required to meet the twelve hour Minimum Service Contribution (MRC) unless they are also a NET volunteer. However, they should log at least one hour each calendar year minimum to remain in active status. Required to complete a criminal background check at PBEM's expense every three years. | | |
| Physical Requirements | A volunteer must be inside a 20-minute walk or bike ride of the fire station they are assigned to. | | |
| Task Book | None at this time. | | |
| PPE and Recommended Equipment | PPE: Weather appropriate clothes. Equipment: All the equipment a BEECN volunteer needs should be in their Orange Go-Kit. | | |
| Forms | BEECN Response Framework NET Form 6: Communications Log | | |

(note operational period)

| | |
|-----------------|--------------------------|
| Updated | 2025.06.01 (version 2.0) |
| Released | 2017.10.03 |

Training for VSF 02.02: Fire Station ARO [\[edit | edit source \]](#)

Important note: ONLY the trainings listed as REQUIRED are required! Optional training and supplemental resources are presented as a path for a volunteer to increase their knowledge and confidence carrying out their volunteer responsibilities. Completing training marked as "Optional" or "Supplemental". For more information, please visit the article on [Position Descriptors: Training Section](#).

| Training or Resource | Type | Delivery | Duration | Learning Objective |
|---|----------|-----------|-----------|--|
| Basic BEECN Orientation | Required | Online | 1.5 hours | Summarizes BEECN Guidelines and prepares a new volunteer for working with their BEECN cohort. |
| Hours Logging Training | Required | Online | 1 minute | For BEECN volunteers to learn how to log their service hours in their MyImpact profile. |
| PBEM ARO Training | Required | In-person | Varies | After getting licensed, a PBEM Radio Training Liaison (RTL) will instruct the incumbent ARO volunteer on how to operate the Orange Go-Kit. |
| IS-100: Introduction to the Incident Command System | Optional | Online | 2.0 hours | Course describes the history, features and principles, and organizational structure of the Incident Command System. Knowing the basics of ICS can give BEECN volunteers context to the City's overall response effort. |
| IS-242: Effective Communication | Optional | Online | 8.0 hours | This course covers basic communication skills, how to communicate in an emergency, how to identify community-specific communication issues, using technology as a communication tool, and effective oral communication. Not every sub-topic in this course is relevant to the responsibilities of a BEECN volunteer. |
| IS-2901: Introduction to Community Lifelines | Optional | Online | 1.0 hours | Introduces the FEMA Community Lifelines construct, an outcome-driven response structure used to achieve incident stabilization. PBEM uses Community Lifelines, and knowing them will help BEECN volunteers communicate more effectively with the EOC. |
| Basic NET or CERT (certification) | Optional | In-person | 24 hours | Basic NET/CERT training provides more and varied disaster response skills and situational awareness to BEECN volunteers. |

VSF 02.02: Fire Station ARO Knowledge Base [\[edit | edit source \]](#)

| File/Resource | Description | Author | Publish Date |
|---|--|--------|--------------|
| BEECN Guidelines | The BEECN Guidelines is the "blueprint" for the BEECN program and covers the nuances of program policies. A regular BEECN volunteer doesn't need to know the Guidelines to carry out their responsibilities, but reviewing them will enhance knowledge and provide a more complete picture of the program. | PBEM | 2017.10.03 |
| BEECN video content | Video content relevant to BEECN volunteer responsibilities. | PBEM | - |
| BEECN on Tumblr | Media articles tagged as relevant to BEECN volunteer responsibilities. | PBEM | - |
| Portland Basic Emergency Operations Plan (BEOP) | The BEOP is the framework that governs how the City of Portland responds in the aftermath of a major disaster. Being familiar with it can provide BEECN volunteers with heightened situational awareness. | PBEM | 2016.02.15 |

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NET Operations Plans NET Earth

SAMPLE NET OP
Wemnick Heigh



*Wemnick
Heights*

Great Expectations Chemicals
The chemical plant was built only four years ago and is up to current seismic standards. However, the plant uses significant amounts of dihydrogen monoxide stored in fragile pipes. Dihydrogen monoxide is an odorless and colorless industrial coolant, and can be fatal if inhaled.

Wemnick Heights NET should avoid entering the plant in case the pipes break. We have worked with the plant manager, Jarvis Lorry, and Fire Station 10 to develop a safety evacuation plan for the employees. Jarvis has an FRS radio for plant communications, and has the NET channel programmed in. One of the plant employees (John Barsad, WM7D) is also HAM licensed and keeps a portable VHF set in his car.

2. *Startop Park BEECN*
The closest BEECN site is at Startop Park, and we should expect that local residents may go to the park looking for help. Startop Park is also NSA 2.



1. Immediate Responsibilities Following a Disaster
Immediately following a disaster, members are expected to check themselves and persons in their

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This brings me to the last very important thing we have to talk about with NET: the NET Earthquake Plans. A little background: in 2013 we began asking NETs to have Operations Plans, which would answer critical questions such as where is your staging area? How will you decide who the incident commander is? How will you communicate with each other? And so on. We never had a template for them, so these operations plans were submitted to us in all different shapes and sizes.

In recent years, we've come to realize that Operations Plans are really Earthquake Plans. PBEM, and more importantly your team, does not need an operations plan for any other response posture. So, we've already begun rebranding them as "Earthquake Plans". But the next and far more important thing we need to do is create a template for them. A template is important for several reasons:

- At PBEM, we need to get a common operating picture of what's happening with NETs and we need to know at a moment's notice. A template can help any PBEM staffers, city leaders, or other public safety employees such as fire fighters know at a glance what and how your team is doing.

I'll add to that point a line that Portland NET has crossed in the last ten years. When I started in 2012, people cared about what NET was doing because it was a neat

community engagement project. We've seen a significant change in how leaders and public safety officials see NET. We're not just a social club any more, we are now a critical part of the City's response capacity. That is a HUGE but silent change this program has made, and we have to rise to meet the challenge of that kind of attention. It has happened because NETs have reliably demonstrated that they step up and perform very well when needed. You brought this on yourselves. When it comes to being ready for an earthquake, the City is counting on us to get this right.

- An Earthquake Plan also establishes for your team what response capabilities you want to cultivate, which is done through VSFs. So this is a capabilities model I'm talking about, which is common in Emergency Management. Say for example you want your team capable of, after an earthquake, treating and stabilizing a dozen red tagged patients in your medical treatment area. Based on the knowledge we have at PBEM, we reply back to you: OK, to get that capability, you need: this equipment in these amounts, and you need this many volunteers developed in this VSF. Building and maintaining those capabilities is what will go into your Earthquake Plan.
- The idea of this Earthquake Plan might concern a lot of people wondering if you have the bandwidth to do it. So I want to say two things to that. First: the idea of these Earthquake Plans is that they will be scaled to the resources you have available. If you have a team of three, there will be no expectation that you do what would take a dozen people. Second, give it a chance. Give me the space I need to release the template when it's ready, and then let's start worrying.

Pull back/review: NET highlights

1. Step up recruitment and onboarding for ATVs
 - When you're ready for ATVs, let Jeremy know and he'll start ringing the bell
2. A template for Earthquake Plans is coming
3. NETs will soon have resources to share with neighborhood small businesses

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We're about to go into the NET/BEECN merging. But a couple key points review:

- Start bending your thinking towards recruiting more ATVs. Right now and for the foreseeable future, PBEM will never be able to churn out the critical mass of trained NET volunteers all of us would wish for.
- Start thinking about your earthquake plan and what response capabilities you want to consider for your team.
- Start scoping out what the small businesses are in your service area and be ready to distribute prep information to them, if you want to get them more involved. Or at least prepared.

Strategic Plan for BEECN



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So now this brings us to BEECN. Let me do a quick review of how BEECN was started, and where we are now, and why we are merging the NET and BEECN programs.

BEECN started at PBEM at the same time I did: September 2012. The idea came from Mayor Sam Adams. There were two parts to his vision for BEECN: most important was a radio-based network of communications that neighborhoods could use to reach the City of Portland after an earthquake. The second part, though less important, was to supply NETs with supportive equipment to use the radio network and establish command posts. And by the way, that's exactly the reason original BEECN caches have a big plate welded to them that says "Portland NET".

But instead of merging BEECN and NET, they grew up as separate programs. I'm honestly not exactly sure why that happened; I think my boss at the time wanted to me to concentrate on reviving the NET program and so they hired Ernie to manage BEECN. So the programs sprouted off apart from each other. I think part of it was that NET volunteers did not want to comingle BEECN sites and NET staging areas. Bottom line: the BEECN program was a great idea. Hiring Ernie was a really great idea. Managing them as separate programs was a mistake.

Strategic Plan for BEECN



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We stock BEECN caches with three types of equipment: the radio, medical equipment, and supportive equipment. The medical and supportive equipment was intended for NETs to use putting up command posts, and BEECN volunteers would manage the radios. But PBEM never gave NETs the discretion to site the equipment intended for them the way they wanted to. So it fell to the BEECN volunteers to manage that equipment. But we give BEECN volunteers no command training and no medical training. NETs get that training and BEECN volunteers have access to it, but it's not part of our expectations of BEECN volunteers.

Because PBEM insisted on putting all that equipment into shiny and barely secured boxes instead of handing the equipment over to NETs, a lot of those boxes were inevitably stolen. If we had instead allowed NETs to simply take possession of the equipment and incorporate it into their teams, we'd have probably saved a lot of taxpayer dollars.

So that's one reason we're merging the programs: to correct an old mistake that was never resolved.

Strategic Plan for BEECN



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The other reason is that Ernie retired and his position was cut from PBEM's budget. That left Glenn and I to manage all of his program with no added capacity.

[[CLICK]]

And let's be real: how could scores of Jeremys and Glens replace this guy anyway?

Remember when I said if you chase two bats, you lose them both? Both the BEECN program and the NET program has suffered because of our divided attention. How we manage our programs needs to reflect our staff capacity.

Process for merging NET and BEECN

1. Match BEECN resources to NET service areas
2. Identify independent BEECN crews
3. Onboard BEECN volunteers to their NETs
4. Divide up BEECN equipment
 - Radios to BEECN volunteers
 - Medical and supportive equipment to NETs
 - BEECN boxes to NETs or to be recycled if their service life is over

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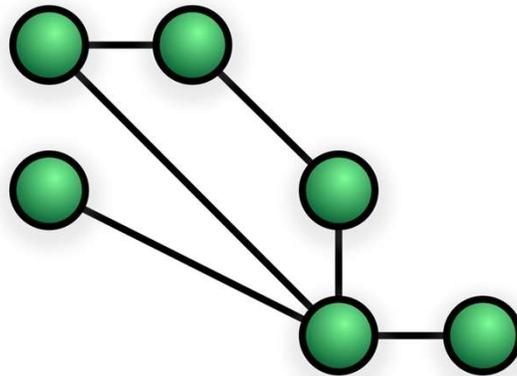
None of this was decided overnight. Glenn and I have been thinking about this a long time, with Ernie's feedback, based on what NET and BEECN volunteers tell us. We have to do something, and I don't know if it's possible to find a solution that each individual volunteer is going to like. But this is the plan that gives me the most confidence. This will unfold over a timeline, step by step, one step at a time, probably one BEECN at a time.

1. First, we figure out which NET teams have which BEECN resources in their service areas. We've already mostly done that, but that process is still wrapping up. In this context, by the way, a BEECN resource is a BEECN cache or a fire station with an orange kit.
2. Next, we divide the BEECN teams into two camps. In the first camp are BEECN volunteer teams who are connected to an active NET. They will now be part of that NET and integrated in that NET's chain of command. In the second camp are BEECN volunteer teams with no NET in their area to report to. They will be independent teams until a NET activates in their area. Until then, PBEM will work directly with the leaders of those BEECN teams, and those BEECN volunteers will remain responsible for the whole BEECN cache they are assigned to.

3. For those in that first camp: we send an email to NET Team Leaders introducing them to their new members, and asking NET Team Leaders to onboard them. Share meeting information, activities, earthquake plans, and so forth.
4. Next, we take care of the BEECN equipment.
 1. BEECN volunteers will always be responsible for the BEECN radios. Those are coming out of the caches. BEECN volunteers will decide where they will be stored. I'll add that those radios are much easier to store alone than a whole cache is. They are the size of a lunchbox, and that opens all new possibilities for where they can safely and securely go.
 2. The orange kits remain at fire stations. No changes there.
 3. That leaves the medical equipment, the supportive equipment, and the cache boxes themselves.
 1. All of that is now going to the NET Team *if they want it*. They DO NOT have to accept it. If they don't want it, PBEM will take it to redistribute it elsewhere.
 2. Nor do you have to take all of it. You can pick and choose what you want. However, anything you take responsibility for will be tracked through a tracking system like the one we use for BEECN. This keeps everyone accountable for the equipment, and also gives PBEM the opportunity to replenish your cache when we have the resources to do so. Because, that equipment helps build your team response capabilities. And we want to support you having capabilities.
 3. We are completely disinvesting from the metal coffins. We are totally done with them. Teams will have one opportunity to take them, and I'll even deliver it. Whatever boxes are left over are going to a metal recycling plant. Also, we will not support maintenance of those boxes. If the lid stops working or you get a flat tire, we can't help you with that and we won't replace it.
 4. Finally: not all NETs have BEECN resources in their service area. Does that mean they don't get equipment? No...we have unused BEECN supplies and those supplies will flow over to those teams if they want it.

I want to encourage teams to think of this opportunity as the opportunity it was always supposed to be: using these resources to seed a cache of response equipment. If you take this equipment, it will be integrated into your capabilities for your team's Earthquake Plan.

BEECNs switching to mesh networks?



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One other thing I'll mention about BEECN: we're exploring moving BEECN to mesh networks. We're still trying to get a sense of the possibilities. But it could mean that we can add more nodes and also eliminate the need for having fire station orange kits in the communications chain. More on that soon I hope.

What happens next for the BEECN/NET merging?

- PBEM to complete process of mapping BEECNs to active NET Teams.
- Begin integration of NETs to BEECNs, one team at a time...this will not be an overnight process.
- See about switching to mesh networks.

Two last plugs before Q+A

- Don't forget to sign up for the Citywide Deployment Exercise (CDE)
- Be sure to get involved in the budget process!

Wed 2/25, 2-5pm - *Service Area Budget Overviews and Discussion, Part 1 of 2 (Public Safety and Comm & Econ Development)*

Thu 3/5, 2-5pm - *FY 2025-26 Expenditure Forecast and Spring Technical Adjustment Ordinance (TAO - replaced "the bump")*

Wed 3/11, 2-5pm - *Service Area Budget Overviews and Discussion, Part 2 of 2 (Public Works, City Admin, City Ops)*

Thurs 3/19, 2-5pm - *FY 26-27 Budget Discussion*

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Discussion! Questions!

