

CLIMATE READY COMMUNITIES

Wednesday, October 7
1:00 PM – 2:30 PM EDT

with special guest
Tonya Graham,
GEOS Institute

GEOS
INSTITUTE

Tonya Graham guides you through the [Geos Institute's](#) Climate Ready Communities program in the second Resiliency Academy webinar. The Climate Ready Communities program is a “Do-It-Yourself” approach for local governments that features a Practical Guide to Building Climate Resilience, a support package for using the guide, and other supplemental services.

Tonya Graham is the Executive Director of the Geos Institute and the program director its ClimateWise and Climate Ready Communities initiatives. For the past 12 years, she and her team have helped community leaders in Oregon, California, Montana, Alaska, Texas, Kentucky, Colorado, and Ontario, Canada understand likely future conditions, determine vulnerabilities, and develop responsible strategies to address them.

Tonya has taken a lead role in developing the Whole Community Resilience planning framework, which integrates the needs of human and natural communities while creating co-benefits across sectors. She is also a primary author of the Institute’s Practical Guide to Building Climate Resilience and led her team in developing Climate Ready Communities — an “assisted do-it-yourself” program for small to mid-sized and/or under-served communities. She is a member of the American Society of Adaptation Professionals.

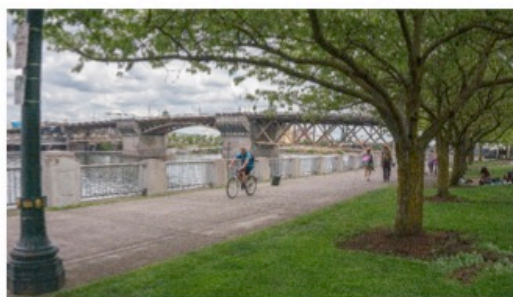
Resilient Virginia’s Resiliency Academy

Fall 2020 Webinar Series:

An Introduction to Four Resiliency Planning Guides



Resilient Virginia’s [Fall 2020 Resiliency Academy](#) is a series of webinars highlighting some of the best resiliency planning tools available to help communities build the capacity to maintain critical functionality and vitality in the face of severe disturbances and chronic stressors.



Climate Ready Communities

Climate resilience support for small to mid-sized communities

Tonya Graham, Executive Director

Resilient Virginia – October 6, 2020

Thank you to Annette and Resilient Virginia for inviting us to share information about our Climate Ready Communities program and how it might help your community. Today we are going to focus on the specific needs of small to mid-sized communities and how your community, no matter where it is located, can get started building climate resilience. We will ask several questions and have you answer them through the Chat section, so please put any questions in the Q&A section. There will also be time for Q&A at the end.

GEOS INSTITUTE

*Mission: To keep human and natural communities whole
in the face of climate change.*

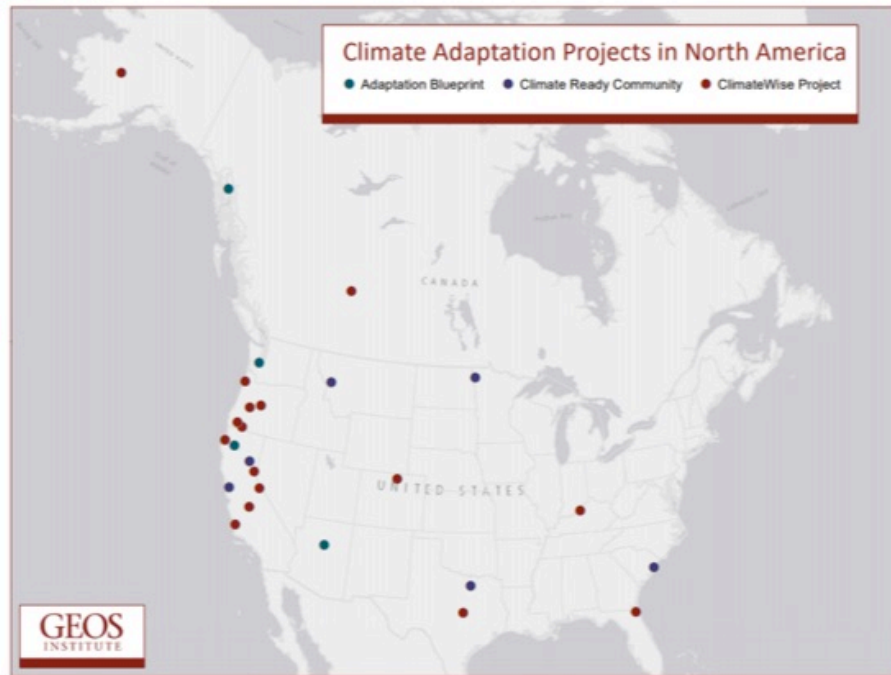


CLIMATE
WISE®



WORKING
WATERS

Our ClimateWise initiative helps communities understand and adapt to changing climate conditions while our Working Waters initiative helps communities protect their drinking water in an era of climate change by using watershed restoration techniques.



Our team has been working for the past 12 years to help communities understand, plan, and implement strategies to strengthen climate resilience. What we've learned is that if you start with adaptation or resilience, it often motivates residents to move forward on efforts to reduce greenhouse gas emissions. It's a great way, sometimes the only way, to start the climate change conversation in more conservative areas. We found that when people look at their own community through this lens, they instinctively get to work. Climate change is no longer about polar bears and melting ice caps – and because we have given them both information and a path for action, they seem to be better able to see the climate crisis for what it is and get to work.



Since 2008 we have worked with a wide variety of communities completing either whole planning processes or specific elements, such as vulnerability assessments or climate change projections. We've worked in small communities, relatively large cities, in farming communities, coastal communities, and both progressive and conservative communities. During that time, we developed a planning framework designed to help local leaders build adaptive capacity while developing ecologically sound, socially equitable solutions.

Responses to Climate Change

- ✓ Mitigation (reduce greenhouse gas emissions)
- ✓ Adaptation/Resilience (reduce impacts)



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There are two primary actions communities take to address the climate crisis and both are needed. Mitigation focuses on efforts to reduce the greenhouse gas emissions that are driving climate change, while adaptation or resilience works to reduce the impacts of climate change on communities and natural systems.

Some strategies can address both issues and communities can start with either mitigation or adaptation — or a combination of both. However it's done, strategies developed to address climate change should consider the impact on both types of action to address climate change.

What do you love about where you live?



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Answers from the Webinar Chat included:

I back up to a 5 acre county park!

Sense of community, walkability

The sunny, warm weather

Clean air and community

Access to nature

Mountains and streams

Variety of urban/suburban/rural settings relatively nearby

Access to farmland in rural areas and museums in the urban areas.

International neighbors.

Great neighborhood of caring people.

Convenience to so many things

4 seasons

Our trees and natural surroundings & ability to grow food

My community has much to offer as far as culture, arts, great environment, etc.

Walking paths and town center where people can get out and see others

Enlightened local government.

Recreation opportunities, ocean/bay access

I love living in a multicultural environment with people from different backgrounds

Walkability; access to amenities; access to the beach

Wide variety of types of communities from farms to urban centers to waterside properties with access to DC and 2 nearby airports

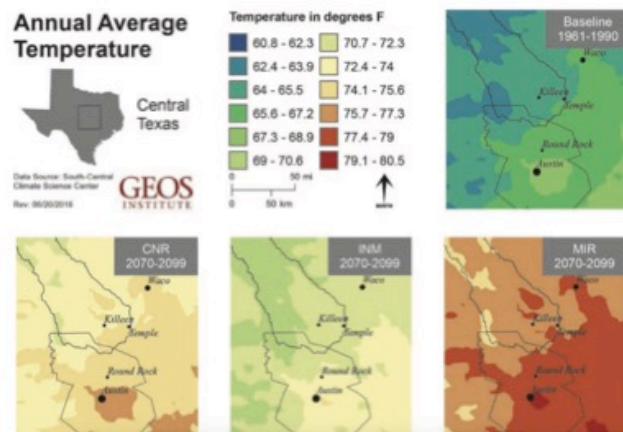
Responsive government

Variety of urban/rural landscapes and diversity in the culture

Access to parks, access to outdoor recreation

Whole Community Resilience

- Science-based
- Socially equitable
- Ecologically sound
- Supports mitigation



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Whole Community Resilience is science-based and works to ensure that climate solutions are both socially equitable and ecologically sound. When tradeoffs need to be made, communities understand what is being traded, who benefits the most, and who pays. Through this process, communities understand the likely consequences of different actions and decide for themselves the best way to build climate resilience. The process also ensures that communities understand the impacts of their strategies on efforts to reduce greenhouse gas emissions. For instance, a community experiencing heat waves might initially think about simply providing air conditioners for low income or elderly residents. If they are consciously assessing the impact of their solution on greenhouse gas emissions, however, they might include tree shading, weatherizing homes, and creating cooling centers as part of their solution to extreme heat.

Whole Community Resilience



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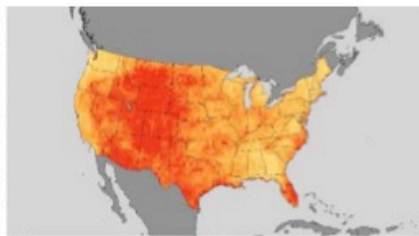
We call this framework Whole Community Resilience. It is a cross-sector, multi-stakeholder framework that is designed in such a way that communities can learn and adjust over time as new information comes available and they see how well initial strategies are working. The process brings together local experts from built, human, natural, economic, and cultural systems. Built systems include all infrastructure in a community from roads and bridges to local government offices, homes, and businesses. Human systems include health care as well as emergency and social services. Natural systems are essentially those ecosystems that surround and help sustain a community. Cultural systems, which involve indigenous communities as well as other distinct populations in your community. And, as you would expect, economic systems include the industries, businesses, and markets that drive the local economy. By breaking down silos between these systems, and focusing on local values, the Whole Community Resilience framework helps communities develop integrated solutions that are win-win whenever possible and create multiple benefits across the community.



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Our Whole Community Resilience framework includes 7 steps that look very similar to the processes used by other climate adaptation and resilience organizations. Over the past five years or so, the adaptation field has converged around a set of similar steps. Communities launch the process by developing a planning taskforce, identifying the scope, and setting timelines. Then climate science comes in as the community assesses past and future climate trends. From there the focus is on identifying what those climate trends mean for the community based on its size, location, economic drivers, natural systems, and local values. This effort to identify and prioritize vulnerabilities builds on your community's knowledge of itself as does the next step of developing and prioritizing resilience strategies for the highest priority vulnerabilities. Once resilience strategies are identified, it's time to finalize and share the plan, then implement it and over time monitor and reassess so that changes can be made when necessary and new information can be incorporated as it comes available. By ensuring that each strategy has an implementation plan and handing the process over to an Implementation Team in step 6, your community can help ensure that its plan is put in motion rather than sitting on a shelf. You'll see that community engagement happens across the seven steps. Bringing your community along in the process, and creating opportunities for all people in your community to engage and contribute leadership, is key to successful implementation.

What climate-related impacts are you already seeing and who is most impacted by them?



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Answers from the Webinar Chat included:

Smoke, wildfire, drought

Flooding, intense storms and extreme heat. Impacts humans and animals.

Recurrent flooding

Animal migration

Severe storms with power outages, trees down and flooding.

Flooding. Community at large, so far

Storms and power outages

Change in agriculture

Flooding throughout areas of the city

Flash flooding — urban flooding, surface flooding impacting marginalized populations that lack recovery resources

Flooding in neighborhoods and businesses

Increased flooding from storms (not coastal). Impacts across the board, but harder for low-income folks to mitigate impacts like mold and to harden their homes.

Severe weather particularly impacting the Gulf coast

Coastal flooding — impacts coastal residents, businesses, tourists

Higher tides, stronger storms, more frequent storms.

Changing agriculture seasons

Insurance issues for coastal real estate, stormwater drainage and damage

Seeing less pollinators.

Sea level rise and more frequent coastal flooding, increased precipitation, impacting both neighborhoods and businesses

More extreme heat days; more short-term but extreme rainfall events. Those most impacted are those who are more financially vulnerable which tend to be minorities and the elderly

Uncertain weather affects agriculture

Severe stormwater and flooding issues impacting all levels of community

New and worsening flooding

Flooding and new delineations of flood zones by FEMA.

More extremes in weather patterns — more precipitation at times and more drought at times

Climate weirdness

Warmer nighttime temperatures

State of Climate Resilience

- Every community needs a climate resilience plan
- Most communities need help
- Many communities cannot afford to hire a consultant
- Help is still not coming from the federal or most state governments
- Mainstreaming alone does not lead to holistic solutions

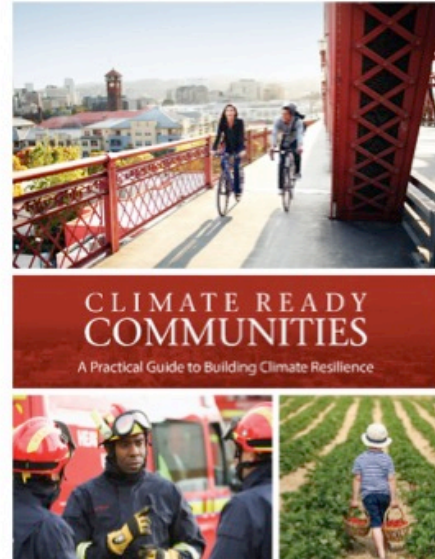


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We created Climate Ready Communities based on our planning framework because we know that every community needs a plan. We also know that most communities needed some help to build one, but cannot afford a consultant. Communities that don't have the funding to hire a consultant or the technical expertise to do it themselves are stranded, increasingly understanding the urgent need to take action, yet not having a viable path to follow. Technical assistance for smaller communities hasn't come from the federal government or most state governments. And, we recognize that while important for implementation, the practice of mainstreaming climate considerations into decisions across local government doesn't lead to the holistic solutions needed to address the issue.

Climate Ready Communities

- Step-by-step guide available for download at no cost



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To address these realities and assist local leaders, we are sharing everything we know about how to build climate resilience. We created our step-by-step practical guide to building climate resilience so that someone without experience planning for climate change can still lead their community through the process. The guide includes suggestions about how you might handle certain steps depending on whether your community is demanding action on climate change or is not yet able to talk about the issue openly. Wherever possible, we have directed users to free assistance in the field. For instance, Climate Access is a leader in engagement techniques related to climate change, so we encourage users to check out their materials when it is time to begin talking with stakeholders and planning their engagement efforts. The guide also includes RFP guidance in case your community has funding to invest in a consultant as well as resources to help address greenhouse gas emissions and sample grant language for requesting support for your local project.

Climate Ready Communities

- Support Package
 - 29 downloadable templates
 - 9 video tutorials
 - Library of webinars on resilience topics
 - One-hour introduction call
 - Access to web portal to track progress
 - Cost: \$500 for 2 years of access

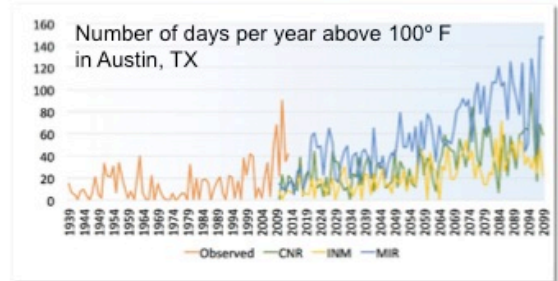


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If your community finds that it needs some assistance or decides that it wants to move through the process faster than it might on its own, it can take advantage of a suite of affordable support services offered by our team. Our annual support package includes templates and tutorials, consulting hours, regular webinars on resilience-related topics, an online forum, and a subscriber portal. The annual fee goes down in the second year as that is when communities are expected to be moving into implementation.

Climate Ready Communities

- Other Services
 - Local climate projections
 - Workshop facilitation
 - Report writing
 - Webinars on resilience-related topics
 - Consulting hours



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If your community needs additional support services, such as local climate projections, workshop facilitation, report writing, customized webinars, or additional blocks of consulting time, you can access that through our additional services menu.

Climate Ready Communities

- Consulting Network
 - Geos Institute staff
 - Engagement
 - Social Equity
 - Climate Science
 - Finance
 - Integration into existing plans
 - Implementation



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Your community can spend its consulting hours by engaging with our staff at the [Geos Institute](#) as well as experts from other organizations in our consulting network as you move through the process. Topics include, but are not limited to: community engagement, social equity, climate science, finance, integration into existing plans, and implementation. We will continue to build out this network as communities identify the specific expertise they need.

What are some of the obstacles you face in moving forward with efforts to build climate resilience?

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Answers from the Webinar Chat included:

Funding

Getting buy-in from leadership

Slow moving governmental process

Funding to help nonprofits and others who want to move forward in this arena as well as municipal governments

Lack of buy-in regarding climate impact

Collaboration challenges

Competing priorities of political appointees and appointed authorities. Why plan for something that may never happen?

Financing/funding flood mitigation projects

Need for more of an integrated approach rather than siloed approaches

Tendency of a community focus on readily apparent short-term needs (e.g., a consultant recommends a specific project due to deterioration or stress on existing infrastructure)

Money. Ex: Large sections of our stormwater management system needs to be replaced and upgraded.

Climate denial, not knowing how to start the conversation

Lack of national infrastructure resiliency and revitalization strategy that mentions anything related to climate change

The myth of perpetual economic growth and resource consumption

Climate Ready Communities



"The Climate Ready Communities program has been an excellent tool for Corinth. It provides clear steps and expert guidance. The backing of the Geos Institute provides credibility and helps to build momentum for our resilience planning."

Patrick Hubbard, City of Corinth, TX



"We find these tools to be effective and designed with a community user's perspective in mind. We appreciate the step-by-step approach as well as the fact that the program is flexible, allowing us to make modifications as needed to fit our specific circumstances."

Diana Maneta, Missoula County, MT

"The Climate Ready Communities program has been extremely relevant and useful for Sierra CAMP as a regional collaborative. The comprehensive guide with its step-by-step organization helps us and our member communities break the climate resilience planning process into manageable steps and build our internal technical expertise."

Nikki Caravelli, Sierra Business Council, CA

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Our team has been working with community leaders across the country who have helped us test the guide and support services to ensure that this program addresses the needs of local government and community organizations in the real world. With that testing complete, Climate Ready Communities is ready to help your community. We launched the program officially in July of 2019 and two of our first pilots are about to complete their climate resilience plans.

Project Scale

- Individual communities
- Counties
- Planning districts
- Cohorts



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One of the questions we often get is what is the best geographic scale for the program. While Climate Ready Communities is well-suited for individual communities, it can be particularly useful for counties, regional planning districts, and cohorts of similar communities that come together to address common vulnerabilities. By working at the multi-jurisdictional level first, communities can benefit by pooling resources and working together to develop strategies that are consistent across a larger planning area. Once vulnerabilities are identified and addressed at that larger scale, smaller communities can implement those strategies and then use this process to address any vulnerabilities that are particular to their community. By starting at the county or regional planning level and then moving to the city or town level, communities can take advantage of scale to address common issues, learn how to identify and address vulnerabilities, and then apply that knowledge to their own local circumstances.

Cohorts

- Multiple cities, towns, or counties in a region or state
- Move through the process together
- Leverage resources
- Oregon cohort
- Alaska and Texas

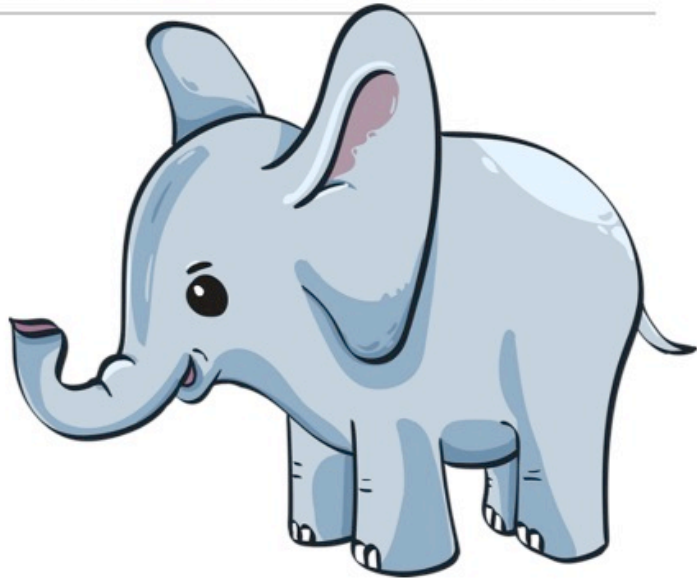


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Cohorts are a good way for communities to move through the Climate Ready Communities program together. Operating as a cohort of multiple cities, towns, or counties in a region allows communities to leverage resources, problem solve together, and create supportive networks and relationships. Our first cohort in Oregon is underway and we have cohorts developing in Alaska and possibly Texas.

The Elephant in the Room

Political polarization
around the issue of
climate change



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The issue of climate change has been polarized in our current political climate, which is unfortunate because climate change affects everyone no matter their political perspective and it will take leaders from both perspectives to address the challenge. If you are in an area where people do not yet agree that climate change is an issue that needs to be addressed, start with one on one conversations with people you think might be interested in working on the issue. Remember that over 70% of people in the US in all regions are concerned about climate change, so if you don't yet have general agreement that this is an issue to be addressed in your community or region, start by finding others who understand the urgency and start building from there.

Yale Climate Opinion Maps

- Searchable by county, state, metro area, and congressional district across the US
- Updated annually
- <https://climatecommunication.yale.edu/visualizations-data/ycom-us/>

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To get a handle on the opinions in your community or planning area, search the Yale Climate Opinion Maps. As more and more impacts become evident, people are moving strongly toward a sense that it is happening, but not as many people believe that we are causing it. What this means is that efforts to build resilience can be better received initially than efforts to reduce greenhouse gas pollution. It is also interesting that in many of the more conservative areas, just as many people think climate change is happening, but far fewer are talking about it, so offering people a safe place to start engaging on the issue can be very valuable.

What is one thing you will do in the next month to move climate resilience forward in your community?

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Answers from the Webinar Chat included:

Continue through the efforts of my nonprofit org working to accelerate clean energy and sustainability solutions.

Bring this topic to groups that don't usually talk about climate impact — after the election

Currently working on our county's Climate Adaptation and Resilience Plan

We are already meeting weekly, so will carry on!

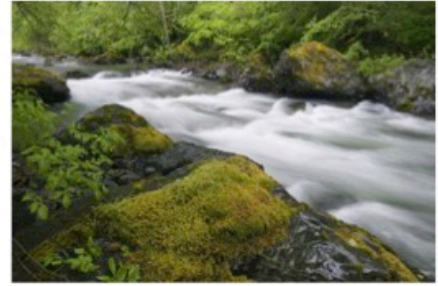
Learn more about the plan that my town has in place and how I can get involved

Continue to read the guidebook and discuss with fellow colleagues and our consultant

We included climate resilience in our awards category for our upcoming event on Four Generations of Leaders in Clean Energy and Sustainability Solutions

Introduce these tools to local government candidates before the election, to get them thinking along these lines

Flesh out ideas and strategies for local workgroup/taskforce for my jurisdiction on climate resiliency. Identify primary partners.



Contact Us

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Feel free to reach out to either myself or Geoff Weaver if you have any questions or would like to discuss your particular situation.