



Mapping Challenges Updates

Thanks to everyone who has contributed to our Mid-Atlantic City/Town Hall Mapping Challenge! It's nearing completion, but not quite finished. If you'd like to help us map the remaining city and town halls in NJ, NY, and PA, head on over to our [Mapping Challenges](#) page for more information.

*A huge thanks to **geo163, Space Kraft, and Trmosher** for helping collect city/town halls in Colorado!*

In addition to our main Mapping Challenges, we've recently added Lightning Challenges, which cover smaller geographical areas and run for shorter lengths of time. We just wrapped up a Lightning Challenge to collect city and town halls in Colorado, and launched another to collect schools in Wayne County, Michigan. We'll be posting more fun seasonal Lightning Challenges, so be on the lookout!

For tips on collecting city and town halls, see the article titled "[Ensuring Data Completeness](#)" in our [July 2019 newsletter](#). Also check out the [Cities vs. Towns vs. Villages](#) article on page 7 for tips on understanding these different types of administrative divisions.

Head over to our [Mapping Challenges](#) page for a time lapse of points as they came in.

If you're new to TNMCorps, Mapping Challenges are a fun tool we use to focus volunteers on areas that need updating. Mapping Challenges are also coordinated with USGS' US Topo Map production schedule, so by participating in current mapping challenges, you're helping prep the data for the newest [US Topo](#) Map!

Volunteer Structures Suggestions

In our [July 2019 newsletter](#) we asked if there were any structures you'd like to see on The National Map and we got some great feedback! As mentioned in the July article, we can't promise that any or all these features will get added, but it helps to know which ones the public values.

Several volunteers wrote in with some great new structures suggestions:

- Libraries/Reading Centers
- National/State Parks
- Veteran's Memorials/Monuments
- County/State Fairgrounds
- Churches
- Community Centers
- Museums
- Radio or Meteorological Towers
- Chimney or Smokestack
- Utility Scale Wind Turbines
- Utility scale solar arrays

Contact us at nationalmapcorps@usgs.gov if you have additional suggestions!

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Volunteer Submissions

This month we have several volunteer submissions we're excited to share with you! When volunteers reach the [Theodolite Assemblage](#) and the [Squadron of Biplane Spectators](#), we ask them to share bios with us (only if they're interested, of course). Both awatters and trmosher reached out after earning the **Theodolite Assemblage** badge, and USGSTaylor reached out after earning the top badge, the **Squadron of Biplane Spectators**! SnowLeopard also reached out to share an interesting hobby she picked up after being inspired by her work with The National Map Corps. Read on to hear more from your fellow volunteers! And if you'd like to be featured in an upcoming newsletter, feel free to [send us](#) bios, stories, pictures, or interesting things you find while editing!

USGSTaylor

“Hello fellow TNMCorps Volunteers,

“My name is Taylor Lucas. I am currently a volunteer with the USGS The National Map Corps and was just awarded the highest category of Squadron of Biplane Spectators for editing over 6,000 points on the National Map. Yes, I have put in a lot of hours since starting in January 2017, but it has been fun and rewarding to get to this level.

“Later this month, I will be starting my last year at Temple University in Philadelphia. I am majoring in Environmental Studies with a minor in Geography and I have already completed my Undergraduate Certificate in GIS Mapping. I started at Temple in a pure science major and love geology but wanted to learn more about our environment in general. My degree program had an introduction to GIS Mapping, which I really enjoyed so I pursued a Certificate in GIS and started my volunteer work with the USGS Map Corps after that semester.

“Over the last 3+ years, I have held internships and participated in other volunteer programs with the US National Park Services (NPS), and The Academy of Natural Sciences of Drexel University in Philadelphia, as well as, going to school full time and holding a part-time job. I have always been able to fit in a few hours here and there for the TNMCorps. This is one of the reasons why this program works for me: I can work on it for 30 minutes or a few hours from home any time during the day. This program gives me the chance to “travel” to new locations within the United States and explore different towns and cities that I would otherwise have no reason to research.

“After graduation, I have a few career paths that I am interested in at this time. One would be with the US National Park Service and other agencies with a land management group or the interpreters program. My other area of interest is in GIS Mapping for our government or with a private organization. I have always thought that the USGS gets involved with cool studies of our planet, volcanoes and earthquakes, and in a small way, I have been a part of their team, so I have no plans of stopping my TNMCorps volunteer work!”



Check out USGSTaylor's bio on the [USGS News page](#)!



Continued on [next page](#)

Volunteer Submissions (Continued)



Check out awatters' bio on the [USGS News page!](#)

awatters

“I have lived almost my whole life in the upstate of South Carolina. I own an archiving service called HeirShare where we help people conserve family items. I have always been intrigued by maps. I developed an interest in graveyards that led me to find out about the National Map and add my home church graveyard as my first point in 2016. Since then I have tried to add or update points in upstate SC and western NC. While many point names and locations are stable, I am finding a lot of schools, for example, that have changed names, closed, or moved. I look for an official school (or school district) website showing the current year’s school schedule which helps determine the correct type school and address information.

“I also always try to look at the ‘Approved’ cemeteries on the map because many addresses need to be added and the coordinates adjusted for accuracy. This area is shot full of small rural churches, many with graveyards not yet on the National Map, that can be spotted with Google Satellite View, then confirmed with Street View. Many also have a website that is a good source for the correct address.

I enjoy driving back roads and as I travel, I find myself noting locations of various types of points so I can be sure they are on the National Map. It has turned out to be an enjoyable hobby.”



SnowLeopard

“When I was mapping the cemeteries in New Orleans, I was so impressed by the beauty of the stained glass that I took a stained-glass course at the Toledo Museum. This is the Tiffany copper foil method. I hope to take more classes.”



trmosher



“I have always had a heart for volunteering as that was how I was raised. The National Map Corps is just one of several volunteer activities that I am involved in.

“The National Map Corps is such a great way for me to give back to my country that has blessed my life in so many ways. I see The National Map as an important tool that will benefit users and app developers in immeasurable ways.”



Cemetery Research and Guidance

Cemeteries can be some of the most challenging features to research, especially if located in rural areas or areas with dense vegetation. It can be quite difficult tracking down authoritative sources confirming their correct names, locations, or even existence. However, unlike other features such as schools, it is rare for cemeteries to have been renamed, permanently closed, or moved. For this reason, *cemetery points that cannot be verified should not be deleted.*

However, there are a few exceptions: Cemeteries located in disturbed areas such as gravel pits, or under water, (e.g., under a lake) should be deleted with a comment indicating why it was deleted. If a cemetery is in an area with dense urban development and the location is now a shopping center for example, the point should also be deleted. Including a comment about why the point was deleted is a tremendous help to us! See more information about deleting cemeteries in the guidance below.

General Cemetery Guidance:

Only delete a cemetery point if:

- You can confirm a cemetery has been destroyed
- Graves in the cemetery have been reinterred at a different cemetery that is already labeled in the editor
- The point represents a single grave site that is not of [historical significance or interest](#)
- The point represents a memorial at which there are no grave sites
- The cemetery is a duplicate point

Do not create cemetery points for:

- Single grave sites that are not of historical significance or interest
- Memorials or monuments with no interments
- Cemeteries for which a name and location cannot be verified (name is a required attribute)

Move a cemetery point if:

- Graves in the cemetery have been reinterred at a different location with the same cemetery name and the new location does not already have a point by that name
- The point does not fall within the cemetery boundary (it should be centered on the cemetery grounds)
- The current point location in the editor is incorrect and the correct location is found and confirmed by authoritative sources (including the Historical Topo layer)

If you can't verify an existing cemetery point:

- Do not delete the point! (unless you can confirm the cemetery has been destroyed, inundated, or developed over)
- Leave the point and move on to other points for which you can find authoritative information

The cemetery data that exists in the editor came from a variety of sources, including older editions of the [USGS Topographic Maps](#) published from approximately 1947 to 1992. These historical Topographic maps may help confirm the name and location of a cemetery, especially if other authoritative sources don't have a lot of information. Turn on the Historical Topo layer in the editor to display a historical Topographic map.

Cemetery Research and Guidance (Continued)

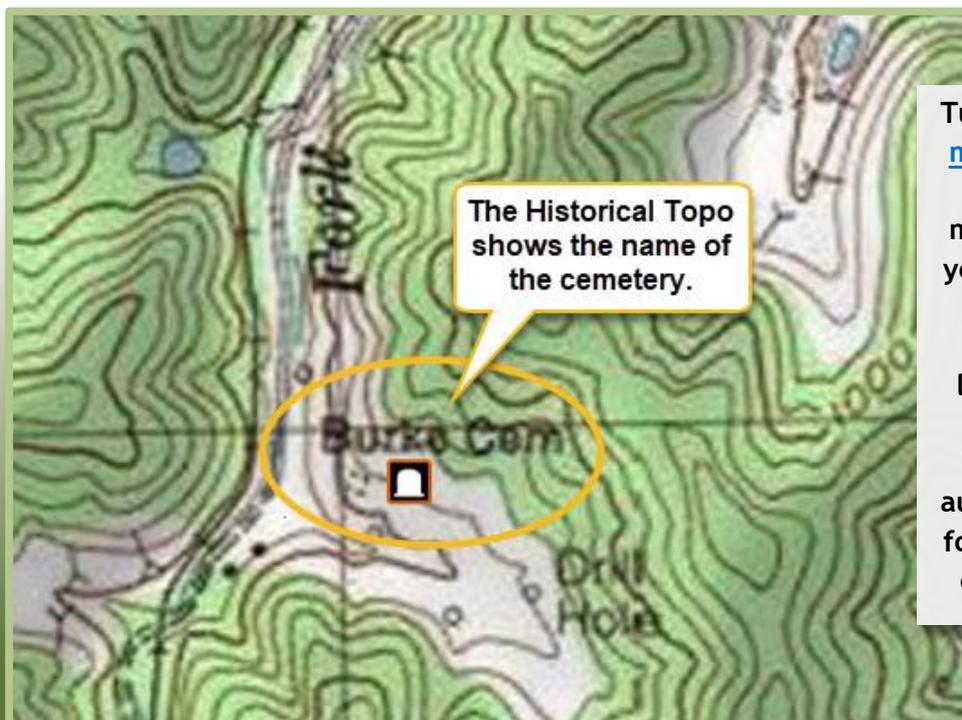
Cemetery Editing Tips: Using the Historical Topo Overlay

Sometimes you'll encounter cemeteries (such as the [Burke Cemetery](#)) that are located in areas so densely wooded that they can't be validated with imagery.

This is a good opportunity to see if the cemetery has been marked in the Historical Topo layer.



Cemetery Research and Guidance (Continued)

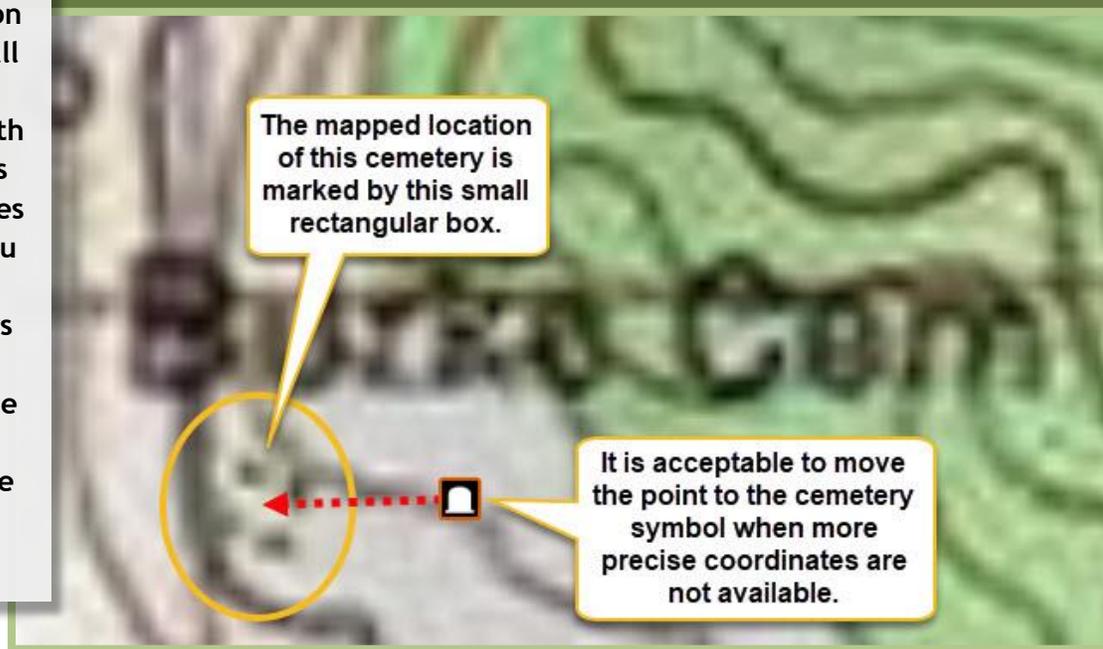


Turn on the [Historical Topo map overlay](#) in the editor.

If you see a cemetery marked on this map layer, you can reasonably assume that the cemetery does exist. We accept the location of a cemetery as shown on the Historical Topo overlay if no other authoritative source can be found and if other deletion exceptions do not apply.

If you know the cemetery exists but can't see the graveyard, the point can be placed using the Historical Topo layer if it is labeled on the map. Look for the small rectangle, usually with a dashed line, sometimes with a cross in the center. This symbol on the map indicates the cemetery location. You can also check the other background imagery layers and commercial imagery available; the variable time of imagery capture may mean cemeteries are more visible due to seasonal changes in leaf cover.

The map location will be a bit different from a GPS location because of the coordinate reference system of the map. GPS locations will be more accurate than the Historical Topo map.



For additional guidance on editing cemeteries, check out the [Q&A forum](#) and our first [aerial interpretation article](#) in the [September 2017 newsletter](#). And if you have any other tips for locating cemeteries, feel free to [let us know!](#)

Cities vs. Towns vs. Villages

Because these features can be challenging to collect (especially on the East Coast), volunteers frequently ask if they should collect a city or town hall for certain administrative divisions such as city, town, or village. There's no straight answer to this because local governments can vary from state to state in terms of size and governing authority.

There are, however, indicators as to whether a local government will have its own designated city/town hall. Among these are population size and level of authority.

Population size can be an indicator of whether a city/town hall exists since larger governing bodies are more likely to have their administrative services performed from a centralized, designated building. Smaller governing bodies often lack a centralized building, resulting in administrative services being performed from multiple buildings throughout the community while council meetings are held in a public meeting area such as a community center or library.

Another indicator of whether a city/town hall exists can be the **level of authority** of the governing body. Some governing bodies are completely subordinate to their county governments and rely on the services administered by the county, while others have some level of self-governing authority and are more likely to have a building from which these services are administered.

This month it will have been one year since we launched city/town halls as a new structure type. Our volunteers have taken off running and collected over 7,000 features to date. Nice work!

Self-Governing Authority

A governing body acquires self-governing authority through a process called **municipal incorporation**. To become municipally incorporated, a governing body receives a **municipal charter** from the state. This charter **grants the governing body the right and authority** to pass laws and perform governmental services for its residents. This is why you may come across terms such as "Incorporated Village" or "Incorporated Town" during your quest for city/town halls. The fact that these villages or towns have incorporated indicate that they are self-governing. If a body of government is self-governing, then odds are the governing body has a designated building from which those activities are administered. These designated buildings fit the TNMCORPS **definition of a city/town hall**.

Did you know that there are **no incorporated cities** in the entire state of Hawaii?? Hawaii is unique in that it only has **two levels of government**: state and county. That's not to say there are no city/town halls in Hawaii; there are a few locations that fit the TNMCORPS definition of a city/town hall. For example, **Honolulu** is a consolidated city-county government and has a city hall. The remaining communities in Hawaii are **census designated places** and fall under county government authority.

Cities vs. Towns. vs. Villages - What is the Difference?

Many different types of governing bodies exist throughout the U.S. Some of the more common ones include **cities, towns, boroughs, and villages**. However, not every state will contain each type of municipal incorporation. This is because each state has its own governmental structure from which municipal charters are granted. As a result, the types of municipal corporations found in each state vary widely as do their levels of authority.



Cities vs. Towns vs. Villages (Continued)

Governing Body	General Description	Municipally Incorporated?
<u>Consolidated City-County</u>	<ul style="list-style-type: none"> • Large human settlement • High population densities • Is affiliated with a county, though <u>city and county governments operate as one governing body</u> • Common in the <u>Midwest and Upper South</u> 	Yes
<u>Independent City</u>	<ul style="list-style-type: none"> • Large human settlement • High population densities • Is not affiliated with a county • Only found in <u>VA, MD, MO, and NV</u> 	Yes
<u>City</u>	<ul style="list-style-type: none"> • Large human settlement • High population densities • Found in almost every state 	Yes
<u>Town</u>	<ul style="list-style-type: none"> • Medium to small human settlement • Medium population densities 	<u>Varies by state</u> Usually yes
<u>Village</u>	<ul style="list-style-type: none"> • Medium to small human settlement • Medium to sparse population densities • May or may not exist in each state 	<u>Varies by state</u> Usually yes, but with <u>less authority</u>
<u>Township</u>	<ul style="list-style-type: none"> • Medium to small human settlement • Moderate to sparse population densities • Similar to a <u>civil township</u>, which is simply a civil division of (and <u>subordinate to</u>) a county • May or may not exist in each state 	<u>Varies by state</u> Usually no (exceptions may exist; e.g., townships are incorporated in <u>NJ</u> and <u>PA</u>)
<u>Borough</u>	<ul style="list-style-type: none"> • Medium to small human settlement • <u>Used in 7 states</u> (AK, CT, MI, NJ, NY, PA, and VA) • Boroughs in <u>NY and VA</u> are subdivisions of <u>consolidated cities</u> • Boroughs in <u>AK</u> are <u>county-equivalents</u> 	Varies by state Yes in <u>CT</u> , <u>NJ</u> , and <u>PA</u>

In summary, there's no straight answer that describes the difference between a city, village, town, or borough for the entire U.S. It varies by state. In some instances, the difference comes down to population size and density. In others, there is [no difference between a municipality called a city or a town](#).

Cities vs. Towns vs. Villages - Which Building do we Collect?

The most important step is to consult with the local government's website to determine whether a specific governing body has a city or town hall building. Once a governing body municipally incorporates, odds are greater that it may have its own designated building to carry out its self-governing authorities. However, that's not to say that unincorporated areas should be omitted; city/town hall points can also be collected for an unincorporated area if such a building exists and **includes dedicated space for the government's administrative purposes**. [Sycamore Township](#) in Ohio is a good example of this.

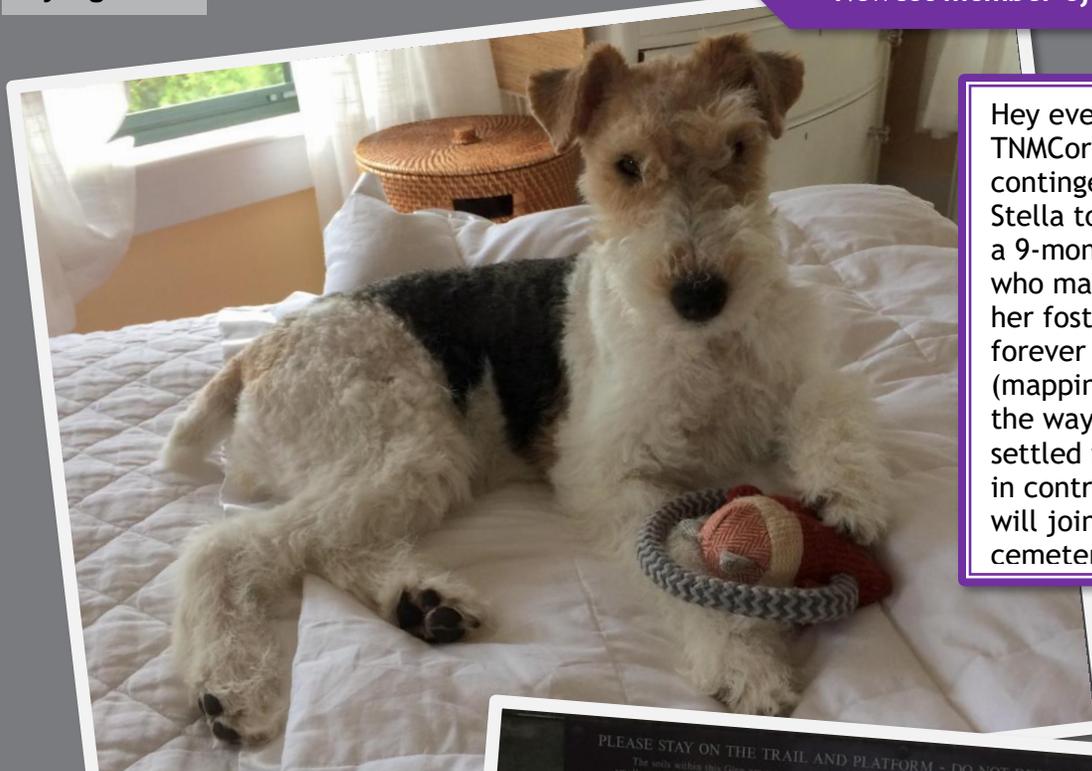
However, unincorporated areas are like the smaller governing bodies mentioned above in that they often lack a centralized building, resulting in council meetings being held in a public meeting area such as a public library or community recreation center. Unless these buildings include designated space that is used solely for governing officials, they do not fit TNMCorps' definition of a city/town hall and should not be collected.

(P)awesome TNMCORPS Members

If you read about volunteer Cgibson in our [May 2018](#) and [March 2019](#) newsletters you'll know that she has dedicated her efforts with The National Map Corps to verifying and updating cemeteries in Rhode Island. Earlier this year Cgibson partnered up with fellow TNMCORPS volunteer RISailor to tackle those tricky cemeteries, but we recently learned that they aren't the only two members of the Rhode Island cemetery mapping field team!

By Cgibson

Newest member of the TNMCORPS Team: Stella!!



Hey everybody! The Rhode Island TNMCORPS historic cemetery mapping contingent is thrilled to welcome Stella to the mapping team! Stella is a 9-month old Wire Fox Terrier puppy who made the long drive home from her foster family in Iowa to her forever family in Rhode Island in May (mapping a couple of cemeteries on the way...). Once Stella is a bit more settled in her new home, and is more in control of her puppy energy, she will join the field team sniffing for cemeteries!

Here's Alfie, hiking and cemetery sleuthing in Vermont:

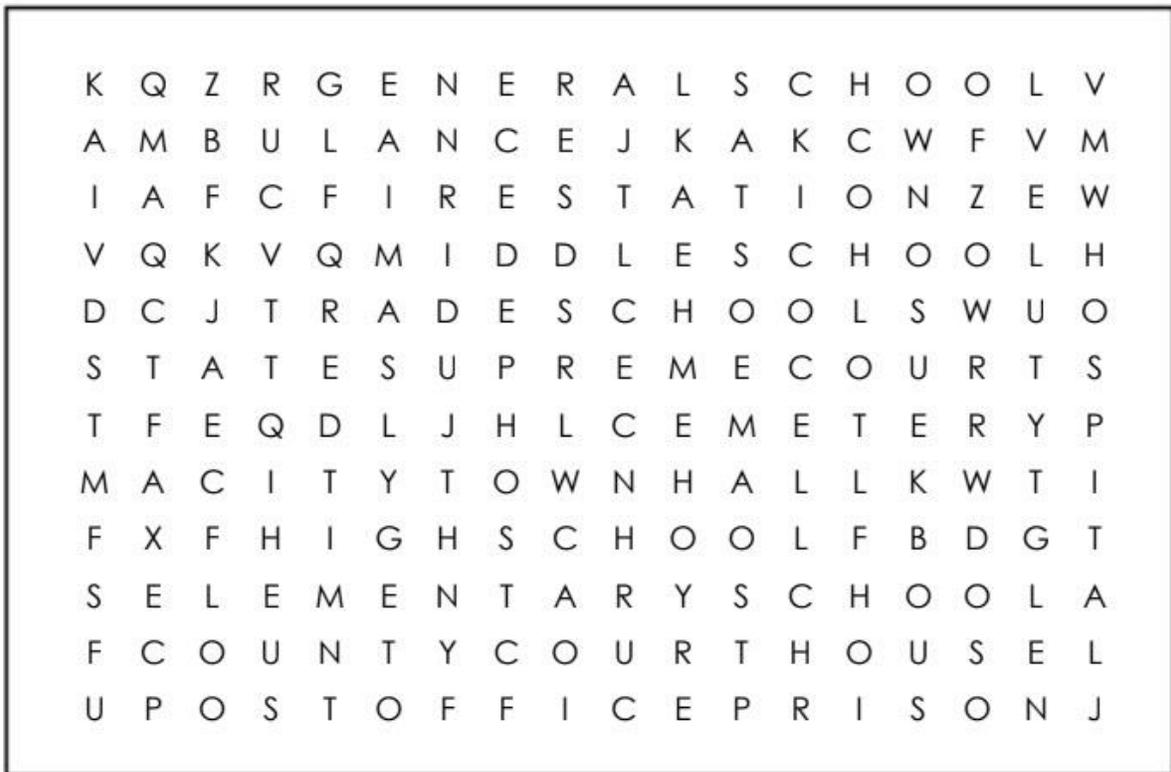
Stella follows the legacy of her late brother "Alfie," who very sadly passed away in the spring from cancer. Alfie was an expert cemetery sniffer who joined us on many cemetery quests.



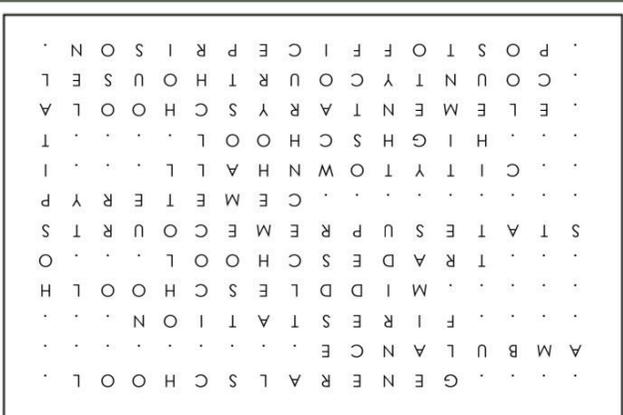
Rest in peace little Alfie and thank you for your service to The National Map Corps!



TNMCORPS PUZZLE: WORD SEARCH!



Solution



- Ambulance
- Cemetery
- City Town Hall
- County Courthouse
- Elementary School
- Fire Station
- General School
- High School
- Hospital
- Middle School
- Post Office
- Prison
- State Supreme Court
- Trade School

Have a story or photo you'd like to share?

We want them! This could be anything from a photo of you verifying a structure or an interesting story that you discovered while editing.

Photos, graphics, and stories may be used in future news releases and social media posts. All materials submitted become part of the “[public domain](#),” and can be used by USGS in the future unless otherwise specified.

Please email them to nationalmapcorps@usgs.gov



New Recognition Category Members



Squadron of Biplane Spectators (6000-6999)

- USGSTaylor



Ring of Reconnaissance Rocketeers (5000-5999)

- USGSTaylor



Family of Floating Photogrammetrists (3000-3999)

- genovt
- trmosher



Flock of Winged Witnesses (4000-4999)

- Mr Ballwin



Theodolite Assemblage (2000-2999)

- awatters
- Peregrine
- trmosher



Alidade Alliance (1000-1999)

- Buz Hopper
- LB2019gis
- Calvin
- smc765
- Trmosher



Stadia Board Society (500-999)

- Trmosher
- Gracebrill
- angmar100
- Old Dad
- rmrobbin
- smc765
- pi24



Circle of the Surveyor's Compass (200-499)

- gracebrill
- smc765
- SallymogLee
- Mwertsalesforce
- Tammyjpetty
- Dreneg
- rmrobbin
- tbranham
- Old Dad



Pedometer Posse (100-199)

- gracebrill
- RennyLammering
- SpotsyGISDave20
- zdhui
- Dreneg
- LindsayK1470
- SallymogLee
- Old Dad
- Tammyjpetty
- smc765
- Mechille
- rmrobbin
- tbranham



Society of the Steel Tape (50-99)

- RennyLammering
- Gracebrill
- Junior P Luche
- Westybsa
- Chin-Yun Kuei
- Old Dad
- StephanieSmith
- mependleton
- smc765
- LindsayK1470
- Dreneg
- AECovington94
- SallymogLee
- @110servicehours
- p-witty
- rmrobbin
- tbranham
- halfdollarbills
- Tammyjpetty
- JalyssaDB
- Kcalh22
- Mechille
- KemilleGreene
- cswitser
- jadams007



Order of the Surveyor's Chain (25-49)

- KalinKhanzada
- Old Dad
- Tammyjpetty
- jluckhardt
- John Melanson
- Kcalh22
- Lauren Sauder
- Steven W Merrill
- KemilleGreene
- Mechille
- RennyLammering
- gracebrill
- mommehk
- Chin-Yun Kuei
- bhs24699
- mependleton
- semcgirt
- westybsa
- kaiserincarla1
- EMWOODWARD
- D4rkD0rk
- Randolph7792
- StephanieSmith
- abaker67
- halfdollarbills
- p-witty
- smc765
- LindsayK1470
- tbranham
- JalyssaDB
- Zoebear
- @110servicehours
- Dreneg
- JLJenkins
- WinterHeart99
- AECovington94
- SallymogLee
- Rmrobbin
- 2KnowIS
- jadams007

CONTACT US AT: nationalmapcorps@usgs.gov for suggestions, questions, additions to the next newsletter, or if you would like to be removed from the email list.

