

A Detailed Opportunity

Last summer one of our TNMCorps team members, Rachel, took a few months off from The National Map Corps to pursue another professional opportunity. She recently rejoined the TNMCorps team and wanted to share a little bit about what she's been up to.

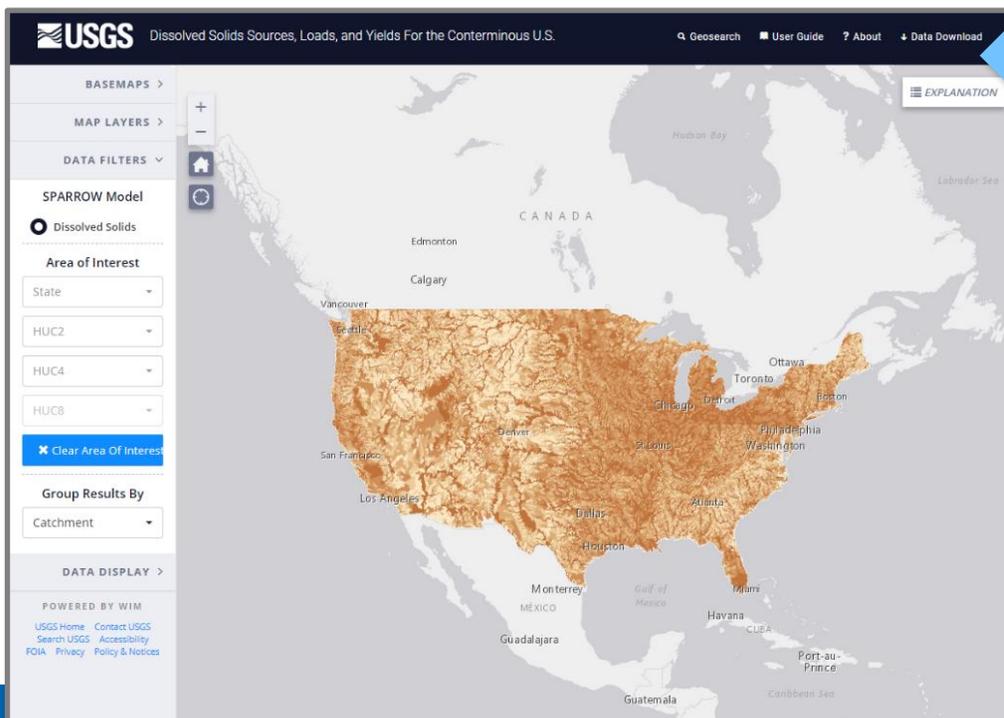
Hello TNMCorps Volunteers!

On July 22nd I started a temporary detail with the [Web Informatics and Mapping Team](#). This team consists of front and back-end developers who create interactive web maps for various government related projects such as [The Flood Inundation Mapper](#) (FIM), which was created to provide an understanding of where floods could occur. I took this detail in an effort to improve my own development skills. While I have created interactive web maps for The National Map Corps in the past, such as the [Structure Finder](#) which helps you find random points to edit, I ultimately wanted to take this opportunity to improve my developer skills in order to be a better developer for The National Map Corps. I feel like I have completed this goal!

During my detail, I gained valuable skills in working with GitHub, writing python scripts to automate data processing, and lastly the layout of how to organize code files in order to create a well thought out application. While working on this detail I had the opportunity to work on an application called [SPARROW](#) which seeks to estimate the amount of a contaminant transported from inland watersheds to larger water bodies by linking monitoring data with information on watershed characteristics and contaminant sources.

My detail has given me the confidence to come back to The National Map Corps and create new interactive web maps that are more organized and better laid out for future developers. Lastly, thank you to my teammates Erin, Sam, and Emily who took on extra tasks while I was away. I deeply appreciate your willingness to take on more while I worked on improving my skill set.

The SPATIally Referenced Regressions On Watershed attributes (SPARROW) model Rachel worked on during her detail.



INSIDE THIS ISSUE

- 1 [A Detailed Opportunity](#)
- 2 [New Mapping Challenge!](#)
- 3 [Neat Find: Zero for a Street Number](#)
- 3 [Authoritative Sources: Clues vs. Cues](#)
- 4 [Proper Use of the Address 2 Field](#)
- 5 [LTPZ's Son Places in Top 10 in Illinois GeoBee!](#)
- 6 [Aerial Photo Interpretation Part 10: Colleges/Universities](#)
- 11 [TNMCorps Puzzle](#)
- 12 [Recognition](#)

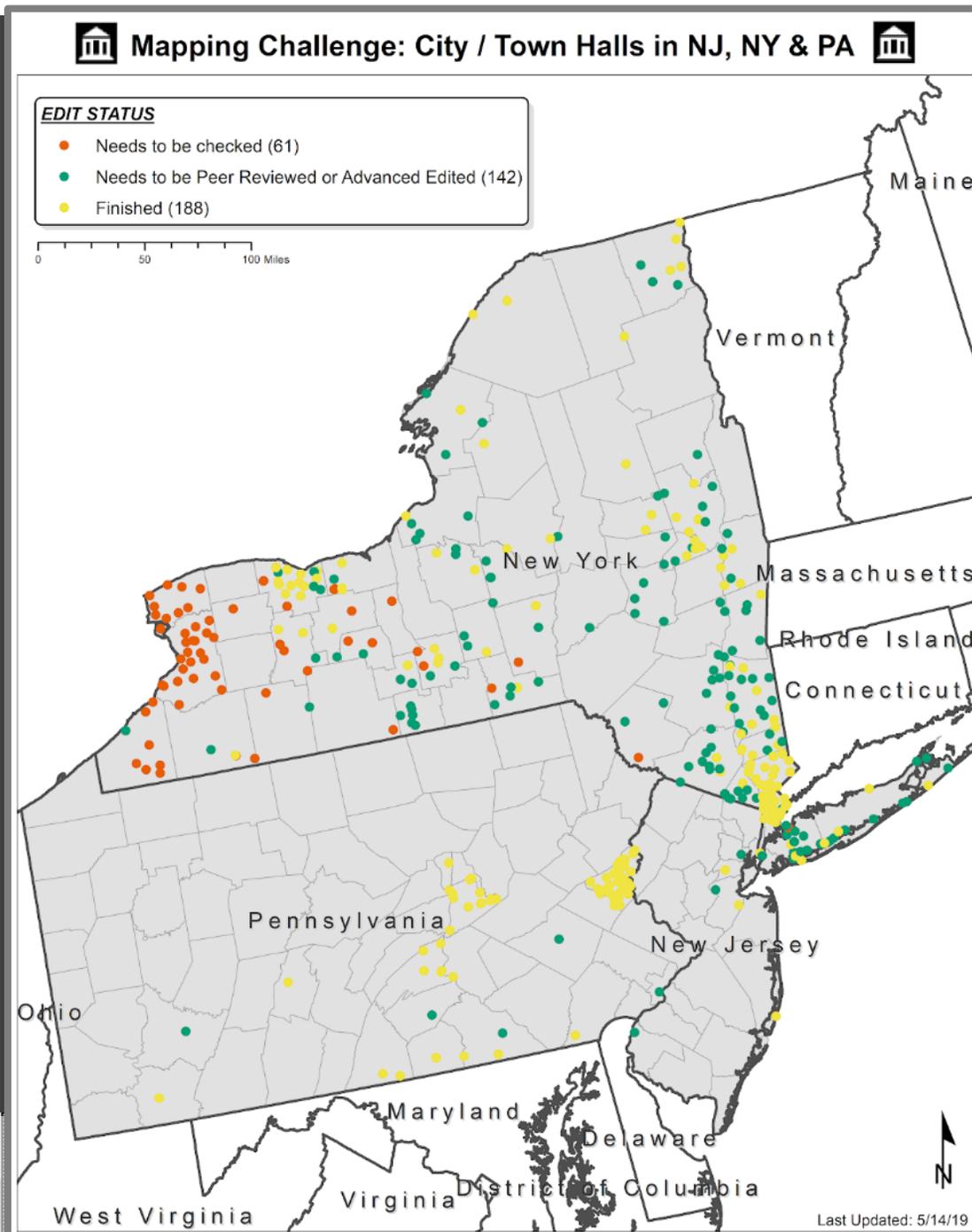
New Mapping Challenge!

The D.C. area mapping challenge has officially closed, so thank you to all of the [awesome volunteers](#) who helped us quickly knock it out!

We're excited to announce that we've launched a new challenge! We're sticking with city and town halls, but moving on over to New York, Pennsylvania, and New Jersey.

What you might notice right away is that New Jersey and Pennsylvania are very empty, so help us fill in these states with those missing city/town halls and verify the ones that are already on the map.

Check out the [Interactive Challenge Map](#) to see how the challenge is progressing, and the [Mapping Challenges](#) page for more information.



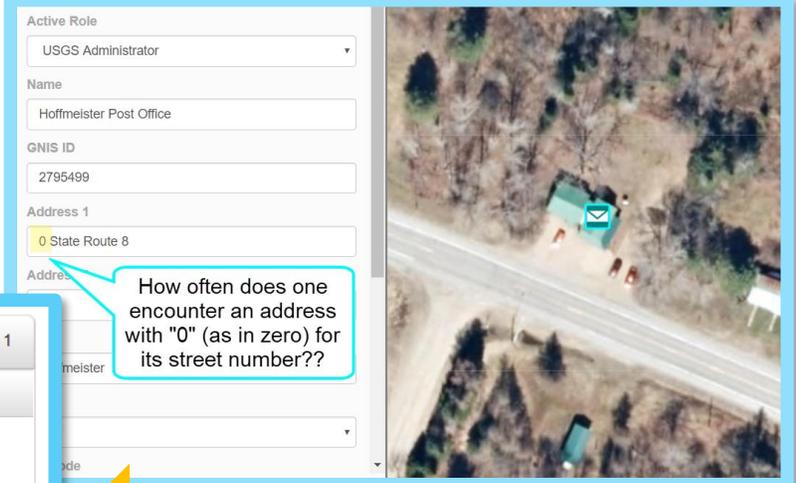
Quick Tips & Tricks for Editing City/Town Halls:

1. Most of the city/town hall structures will fall within incorporated places.
2. There may be multiple city/town hall structures in each county.
3. [Wikipedia](#) is a good place to start looking for lists of municipalities or incorporated places in each county but should only be used as a supplementary source.
4. Different incorporated places may share a building for their city/town hall locations. If so, add a point for each city/town hall.
5. Check out our [November 2018 newsletter](#) for guidance on identifying city/town halls using aerial imagery.

Neat Find: Zero for a Street Number

While editing geographic data for The National Map Corps, we get to take virtual tours of many different areas and often come across unique scenarios that would catch anyone off-guard in their regular day-to-day regimes.

One of our staff members recently encountered a [post office with an address of "0 State Route 8" in Hoffmeister, NY](#). Yep, that's "0 State Route 8" as in z-e-r-o for a street number. An odd find indeed.



And sure enough, that is how the address is listed on [USPS.com's Post Office locator](#). Just goes to show that it can happen!

Authoritative Sources: Clues vs. Cues

The organizations that our structures data represent are always changing. Leases are expiring, budgets are getting passed with funds for new buildings, and contracts are coming to an end. The list of reasons behind the dynamic nature of our structures data is never-ending. To catch these transitions in action, we encourage our volunteers to look for sources authored by the organizations themselves (i.e., [authoritative sources](#)) vs. aggregate lists or secondary sources. Authoritative, or primary, sources are the first to reflect any changes, which we can often pick up on by examining these sources for **key clues**.

Case Study: Detroit Schools

We came across one of these very scenarios recently, where a school had closed within the last year but both the [district website](#) and [NCES](#) still listed the school. The school's individual [website](#) was still online but missing key information such as name and address, which prompted us to search for news of the school closing. After discovering two separate articles ([article 1](#) and [article 2](#)) published in recent months confirming the school's closing, we deleted the point.

The School District still lists the school...

DETROIT PUBLIC SCHOOLS COMMUNITY DISTRICT	
Students Rise. We All Rise.	
Moses Field Center	
Mumford High School	
Munger Elementary--Middle School	
Murphy Elementary--Middle School	
Neinas Dual Language Learning Academy	
New School at Marygrove College	

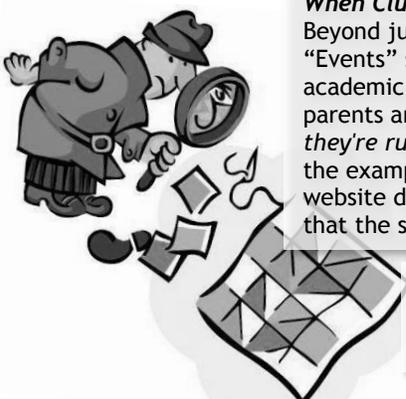
... though the absence of information on the school website is a **key clue**...

```

DPSCD API: RENDER SCHOOL PROFILE HEADER
Phone: Fax:
GRADES          MENUS          SCHOOL REPORTS
BELL SCHEDULE   PEACHJAR FLYERS
OFFERINGS
                    
```

When Clues become Cues: News & Events

Beyond just name and address information, additional **key clues** to look for can be found in the "News" and/or "Events" sections of an organization's website. An open school is usually hustling and bustling with activities, be they academic or extracurricular in nature. These activities are typically posted on the school calendar as a reminder for parents and students. *Keep in mind that not all schools maintain robust websites with events calendars, especially if they're rural, small, or private. These suggestions are only meant to serve as guidelines, not as hard and fast rules.* In the example above, the school's website didn't even contain an "Events" or "News" section; another clue. If a school's website does have a calendar, and the most recent event listed is from several months ago, that could be an indicator that the school is no longer in operation (i.e., a clue) and a call to action (i.e., a cue) to conduct additional research.



Searching for key clues on a website applies to more than just schools. The same research can be applied to other structure types including (but not limited to) fire stations, ambulance services, and city and town halls. The absence of these features on a website could be a cue to conduct additional research.

Proper Use of the Address 2 Field

Many of you may be wondering what the “Address 2” field is for and when to use it. The “Address 2” field is an optional field used to provide additional location information for scenarios when a building name or number is provided along with a street address.

For instance, a university or college campus may have a single address (i.e., street number and street name) to represent the entire campus, but uses building designators such as “McClaren Hall” or “Building E” to direct mail and visitors to specific buildings (see our [User Guide](#) for where to place a College/University point). When updating these university points, users have the option of placing the building name in the point’s ‘Address 2’ field. Similarly, a municipality may have multiple departments (e.g., fire and police departments) operating out of the main city hall. When updating the point for the fire or police department, users have the option of placing the city hall’s official building name in the ‘Address 2’ field. See the examples below for additional guidance on how to properly use this field in these types of scenarios.

So, when should volunteers populate the “Address 2” field?

Volunteers should populate this field when a building designator is used in the official address on an [authoritative source](#). Check out page 2 of our [Name and Address Formatting Guide](#) for more on how to use the “Address 2” field. We have several [Q&A entries](#) on this topic as well:

- [Building Designators and the ‘Address 2’ Field](#)
- [What to do with Suite and Building Information](#)
- [“Town House” instead of Town Hall?](#)
- [What to do with P.O. Boxes in address fields?](#)

It is important to note that the “Address 2” field is **not** for items such as P.O. box numbers or geographic coordinates. Any of this supplemental information can optionally be included in the point’s “Comments” field.

Here are some examples of both proper and improper uses of the ‘Address 2’ field:

In this first example, terminology was improperly added to the “Address 2” field to describe the type of facility for this [Sumter County fire station](#). This type of terminology is better suited for the Name field because it is an official part of the name.

This next example pertains to a [police department](#) on the [University of California, Santa Barbara’s](#) campus. Since the university only uses building designators in place of street numbers and street names for its addresses, the correct way to populate this point is with crossroad information for the Address 1 field and the building designator as listed on its website for the Address 2 field.

When no street number or street name is provided, populate the “Address 1” field with the nearest street or crossroad information.

In this last example, the [Bellevue Police Department](#) operates out of Bellevue’s City Hall. The police department confirms this by including the building name on its [website](#). Therefore, when updating the point, editors can populate ‘Address 1’ with the street number and street name, and ‘Address 2’ with “Bellevue City Hall.”

LTPZ's Son Places in Top 10 in Illinois GeoBee!

What do TNMCORPS and the National Geographic GeoBee have in common?
 The answer is TNMCORPS volunteer Lisa (LTPZ) and her son Andriy!



On Friday, March 29th, 2019, my son Andriy had the honor of being named by the [National Geographic Society](#) as one of the 2019 Illinois State Top-10 "GeoBee" Finalists in this year's annual [National Geographic State Competition](#).

For those who aren't familiar with the competition, the National Geographic "GeoBee" is now in its 31st year. It was developed by the National Geographic Society in 1988 to promote geographic knowledge among young people in the United States. It is an academic competition open to public, private, and homeschooled students in the United States and its territories, as well as the [Department of Defense Dependents Schools](#) (DoDDS).

Annually, students in grades 4-8 from nearly 10,000 schools compete locally to determine their school champion and for the chance to be able to sit for the online qualifying exam. The National Geographic Society then uses that exam to invite up to 100 of the top-scoring students in each of the 50 states, the District of Columbia, Department of Defense Dependents Schools, and U.S. territories to compete at the State level GeoBee Semifinals. The semifinalists then have a chance to qualify for one of the 10 spots on stage of the State Finals, which are held later the same day. Placing in the Top-10 qualifies the students for a chance to win prizes like college scholarships and to represent their state at the national level championships, which are held in Washington DC.

At first glance, Andriy is a typical seventh grader. Three times a week, he arrives with his trombone, along with his classmates, for 7:00 am Symphonic Band rehearsal. The rest of his school day is like any other straight "A" student's at his school.



One of his fond early memories is Geocaching with his mom Lisa, when she was preparing to teach basic map & compass skills, or more advanced GPS navigation to scouts or other youth groups. Another fond memory is learning all the flags and capitals of all the countries of the world with his dad, Yuriy. By the beginning of second grade Andriy already knew all of them, and one of his favorite songs was about naming all the countries of the world.

Andriy loves traveling and exploring new and/or rediscovering old places. In fact, his first trip was to Hawaii at only 6 weeks old, and was where he visited his first National Park site, [Volcanoes National Park](#), on the Big Island. Since then, he and his parents have traveled and explored countless locations in North America. So many, that with a little help from mom's love of the [NPS Junior Ranger Program](#), Andriy has earned a collection of well over 300 Junior Ranger badges and patches from locations as near as Chicago, and as far away as Alaska, Guam, Puerto Rico and Maine.

When not traveling with his parents, Andriy loves to read and watch programs like Star Trek, Have Gun - Will Travel, North Woods Law, Mysteries at the Museum, and channels like History, Discovery, and of course the Travel and National Geographic Channels.

What does Andriy want to be someday? Well, yesterday it was an Astrogeologist. Today, it's an Aeronautical Engineer. Tomorrow? Who knows... but for now, with his love and knowledge of geography, and a little guidance from mom, Andriy is hoping he too will be able to join TNMCORPS!



As seen by the map which Andriy drew when he was in first grade, he has been interested in mapping and the relationship between him, his environment, and the world around him, since an early age.



Congratulations to Andriy and Lisa! We are not surprised at all to find out that our amazing TNMCORPS volunteers would have such geographically inclined kids! We are looking forward to having them as future TNMCORPS volunteers!



LTPZ's Son Places in Top 10 in Illinois GeoBee! (Continued)

How would you fare as a National Geographic GeoBee contestant? See if you can answer these questions!

1. The Magdalena River, the principal river of Colombia, flows through the city of Barranquilla near the Caribbean Sea on which continent?
2. A narwhal is famous for its tusk and spends most of the winter months under the sea ice in what Bay between Canada and Greenland?
3. Which country does not include part of the Kalahari Desert—Namibia, Botswana, or Eritrea?
4. Commercial flower bulb production is an important economic activity in what country just north of Belgium?
5. Located near the Green Mountains, Montpelier is the capital of which state?
6. The Alboran Sea and the Ionian Sea are both part of which larger sea?
7. Where is the shortest international border, and where is the longest located?
8. Rhode Island is the smallest state in the United States. But which five countries are even smaller and can fit collectively into the total area of Rhode Island?



SOLUTIONS: 1. South America, 2. Baffin Bay, 3. Eritrea, 4. Netherlands, 5. Vermont, 6. Mediterranean Sea, 7. The shortest is between Spain and Morocco. An 85-meter sandy strip of land that connects Morocco with the Spanish peninsula of Peñón de Velez de la Gomera. The longest is between Canada and the United States, at a length of 8893 kilometers. 8. Vatican City, San Marino, Monaco, Andorra and Liechtenstein

Aerial Photo Interpretation Part 10: Colleges / Universities

This article is the 10th in a series of newsletter articles highlighting aerial photo interpretation for different structure types. This month we will focus on Colleges/Universities.

Check out our past [newsletters](#) for the other articles in this series:

[September 2017](#) - Part 1: Cemeteries

[November 2017](#) - Part 2: Post Offices

[January 2018](#) - Part 3: Fire Stations and EMS

[March 2018](#) - Part 4: Prisons / Correctional Facilities

[May 2018](#) - Part 5: Hospitals

[July 2018](#) - Part 6: Ambulance Services

[September 2018](#) - Part 7: Law Enforcement

[November 2018](#) - Part 8: City / Town Halls

[March 2019](#) - Part 9: Schools

You may not realize it, but every time you participate in TNMCorps you are conducting aerial photo interpretation. This part of the process of editing structures can be quite fun and interesting. In order to identify the correct building associated with a structure point, you must do a little bit of detective work by searching for clues in the imagery. You may be an expert at this, or you may be new to it. Either way, here are some helpful tips and tricks for interpreting the aerial photography background layers and identifying building types.

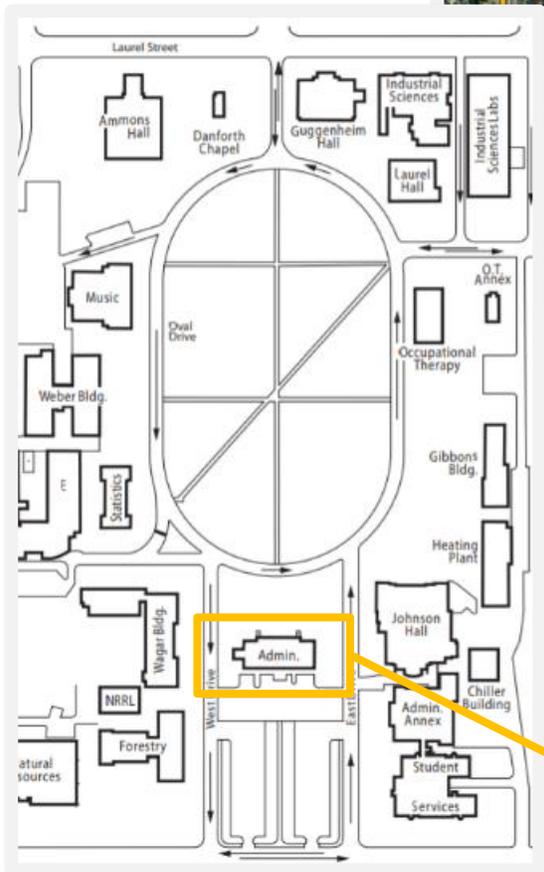
In some ways, using aerial imagery to identify college and university campuses is fairly straightforward. Most traditional university campuses are made up of a collection of classroom buildings, student union buildings, dormitories, large sports fields or stadiums, and often a quad, or quadrangle, that serves as the campus center. Colleges and universities often have a limited number of drivable roads and can also frequently be identified by a network of walking paths that cut across the campus. If you see all these features clustered in a relatively small geographic area, you are likely looking at a college or university campus.

Aerial Photo Interpretation Part 10 (Continued)

In other ways, however, the collection of buildings that make up a college campus may make them more difficult to identify in aerial imagery. Often there is no single distinguishing physical feature that makes colleges or universities stand out in aerial imagery, and some campuses may be so spread out that using aerial imagery alone isn't very helpful. Sometimes smaller colleges may be housed in a single building without any of the distinguishing features mentioned above. That's why it's important to do additional research using [authoritative sources](#), and especially campus maps (if available), to verify the location of a college or university.

But with all those buildings to choose from, where are you supposed to place the point? If you can find it, we recommend placing the point on the main campus administration building. Again, it's unlikely you'll be able to identify the main administration building using imagery alone, but this is where campus maps really come in handy. For more information on editing these types of features, check out the [Cleaning up University Campus Points](#) page in the [User Guide](#). If you really can't find the administration building, find a building located in the center of the campus, and place the point there.

Colorado State University



Since it's not evident from the imagery alone which building on the CSU campus houses administration, we can compare the campus map to the imagery to identify the correct building on which to place the point.

<https://admissions.colostate.edu/media/sites/19/2014/09/campus-map.pdf>

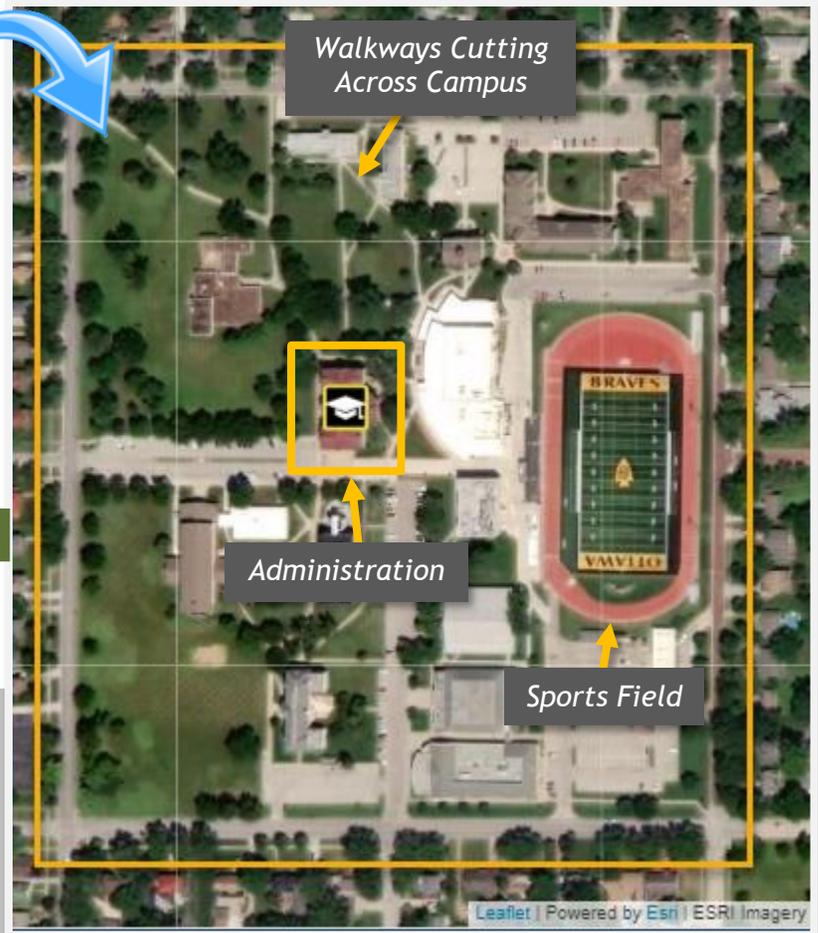
Aerial Photo Interpretation Part 10 (Continued)

Ottawa University

This campus is identified by a cluster of buildings around a large sports field. It helps that the name of the university sports team is clearly visible! More research is required however to figure out where the administration building is.



In this example, we again used aerial imagery in conjunction with the campus map to identify the correct building (administration) on which to place the point.



Campus Facilities

- Administration Building (8)
- Atkinson Hall (1)
- Behan Hall (2)
- Fredrikson Chapel (12)
- Gangwish Library (7)
- Gibson Student Center (9)
- Tauy Jones Hall (4)
- Ward Science Hall (13)

Residence Halls

Athletic Facilities

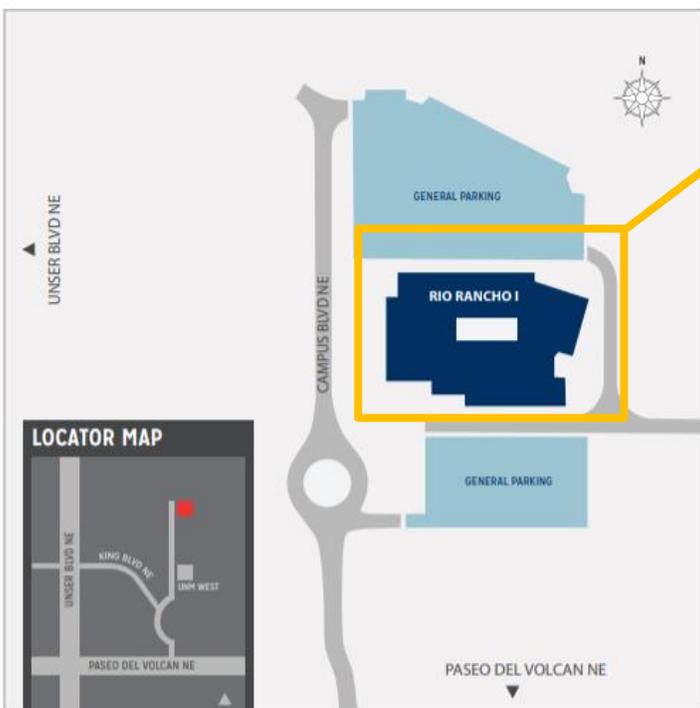
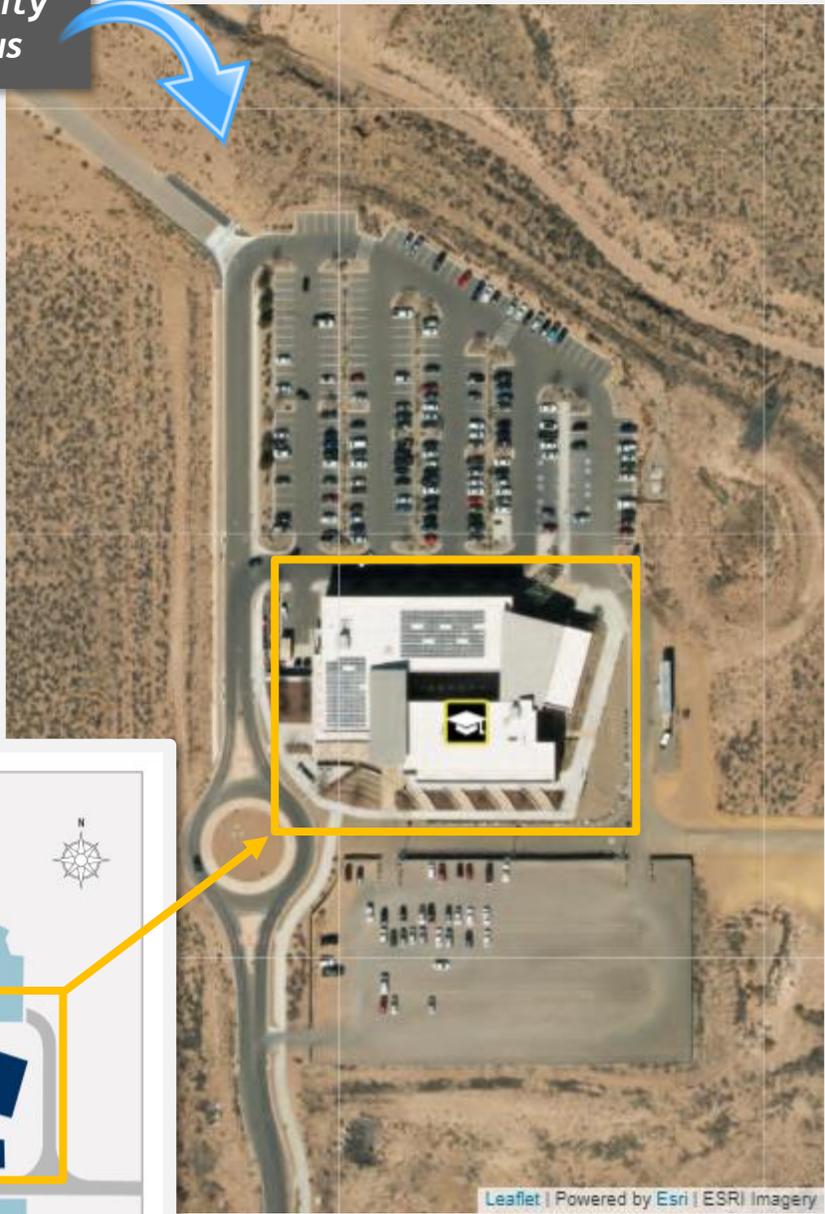


<https://www.ottawa.edu/ouks/special-items/virtual-map/>

Aerial Photo Interpretation Part 10 (Continued)

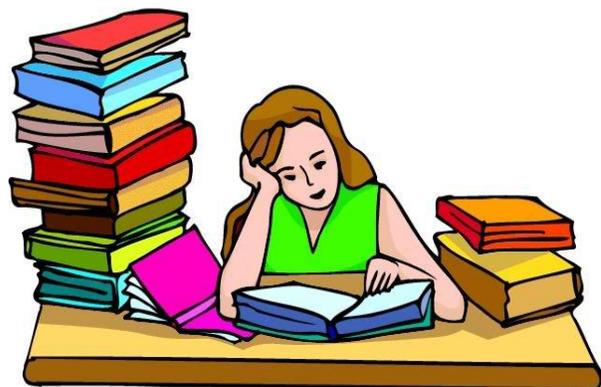
Central New Mexico Community College - Rio Rancho Campus

The CNM Rio Rancho campus is a single building surrounded by large parking lots and doesn't have any of the features that make traditional campuses easy to identify in imagery. Despite the lack of visual clues in the imagery, we can still utilize the campus map to help us identify the correct campus building.



RIO RANCHO CAMPUS DIRECTORY

2601 CAMPUS BLVD NE
ALBUQUERQUE, NM 87144
(505) 224-3000

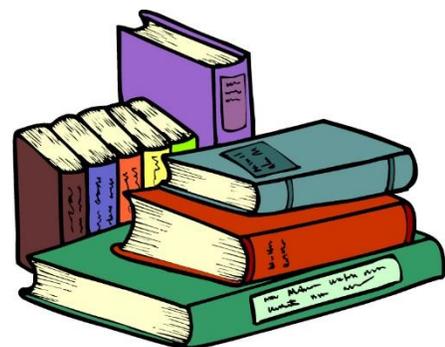


Aerial Photo Interpretation Part 10 (Continued)



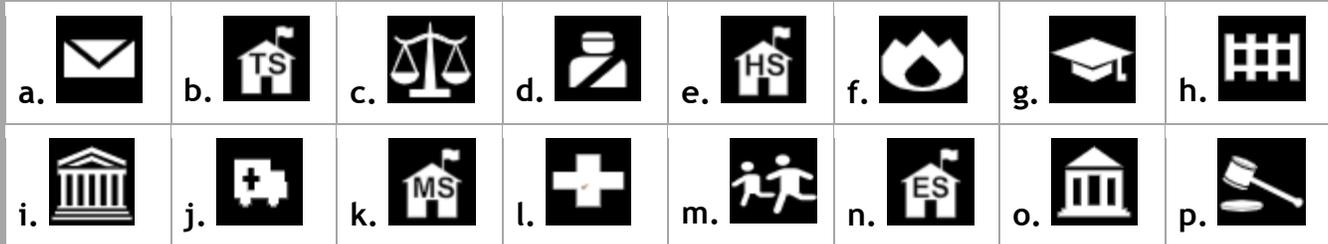
Vista College - El Paso Main Campus

Like in the CNM example, there's nothing in the imagery alone that tells us this is a college campus. The main website doesn't contain a nice campus map, but they do have an image of the building that we can compare to on-the-ground imagery.



TNMCorps Puzzle

Match each definition to the correct icon! Enter the letter next to each icon in the space next to the correct definition. If you get stuck, refer to the [Structures List](#).



A building used to house ambulances and from which medically-trained staff are dispatched to transport emergency patients and administer emergency medical treatment (en route or at the scene).	
A single building that serves as the primary location for a local or municipal government's administrative functions.	
A building or complex for the confinement of persons convicted of crimes.	
The Supreme Court of the United States, located in Washington, D.C.	
A place or area for burying the dead or storing ashes.	
A building or building complex used as an institution of higher learning that grants a degree at the completion of a course of studies.	
A building which houses the ultimate judicial tribunal in the court system of a particular state.	
A building that houses police stations or sheriffs' offices.	
A building or building complex used for vocational or technical training and often for job-specific certification.	
A building that contains fire-fighting equipment and personnel or a provider of combined fire-fighting and rescue services.	
A school for the beginning years of a child's formal education, often including kindergarten.	
A building or building complex used as a learning center for children grades kindergarten through high school.	
An official facility of the U.S. Postal Service used for processing and distributing mail and other postal material.	
A building or building complex providing inpatient services for general medical or surgical care.	
A school between elementary school and high school, usually having three or four grades, variously including grades 5 through 9.	
A secondary school attended after middle school that usually includes grades 9 or 10 through 12.	

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)



Family of Floating Photogrammetrists
(3000-3999)

- genovt



Theodolite Assemblage
(2000-2999)

- Teri2115



Stadia Board Society
(500-999)

- twong
- yinm988
- kimchi
- d_scott
- Buz Hopper



Ring of Reconnaissance Rocketeers
(5000-5999)



Flock of Winged Witnesses
(4000-4999)



Alidade Alliance
(1000-1999)

- SaltyHiker



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

- kimchi
- TUFFYJCW
- RyanLIFireEMS
- kvaughan1974
- Frank_Z_NJ
- d_scott
- Buz Hopper
- JISIBOR



Pedometer Posse (100-199)

- kimchi
- Frank_Z_NJ
- d_scott
- kvaughan1974
- Buz Hopper
- Are1718



Society of the Steel Tape (50-99)

- FJD
- Frank_Z_NJ
- d_scott
- kvaughan1974
- Buz Hopper
- DC Cherry Tree
- gcvallad
- TShamus
- knumata
- brt11002
- zdhiu



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

- ejgabbey
- Allierosel
- Alphaging
- Frank_Z_NJ
- d_scott
- kvaughan1974
- EllisDA
- angarone
- Buz Hopper
- DC Cherry Tree
- JKorzak
- TShamus
- brt11002
- knumata
- Junior P Luche
- zdhiu

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.

