

BOARD OF COMMISSIONERS OF UTAH COUNTY, UTAH
Public Budget Work Session Minutes – Utah County Surveyor's Office
October 15, 2020
1 | Page



PUBLIC NOTICE IS HEREBY GIVEN THAT THE

BOARD OF COMMISSIONERS OF UTAH COUNTY, UTAH

WILL HOLD A PUBLIC WORK SESSION
IN THE COMMISSION CHAMBERS – ROOM 1400
OF THE UTAH COUNTY ADMINISTRATION BUILDING
100 East Center Street, Provo, Utah
October 15, 2020 – 9:00 A.M.

Members may participate electronically at will, with the anchor location as stated above.

In accordance with the Orange level guidelines instituted by the State Department of Health in the City of Provo, members of the public are strongly encouraged to participate electronically. Physical attendance will be limited to 20 people (including staff) at the anchor location. Once the room has reached capacity the doors will be locked, and additional attendees will be invited to participate online. All individuals in attendance must comply with Provo City Code 9.25 requiring face coverings in indoor spaces where social distancing is not possible with certain exemptions.

The public may participate electronically by joining via zoom at the following link: <https://zoom.us/j/9938818466> or calling (346) 248-7799 or (669) 900-6833, meeting ID: 9938818466. Comments will be limited to three (3) minutes per individual unless otherwise approved by the Board. Please state your name at the beginning of the comment. Please no foul or abusive language.

If a member of the public is unable to provide comment electronically then they may contact the commission clerk to submit written comments for the record by emailing commissionclerk@utahcounty.gov or by calling 801-851-8111

~BUDGET WORK SESSION MINUTES~

WORK SESSION

1. WORK SESSION RELATED TO THE 2021 UTAH COUNTY BUDGET

UTAH COUNTY SURVEYOR'S OFFICE

GARY RATCLIFFE, UTAH COUNTY SURVEYOR – I SHARED THIS WITH COMMISSIONER IVIE ABOUT A YEAR OR TWO AGO. I WANT TO SHARE WITH YOU THE HISTORY OF THE COUNTY SURVEYOR'S OFFICE. IT'S KIND OF MY LAST HURRAH TO BRAG A LITTLE BIT ABOUT WHAT THIS OFFICE HAS DONE. THEN IT WILL BE ANTHONY'S BIDDING TO DO THE BRAGGING BUT I'M GOING TO DO IT FOR NOW.

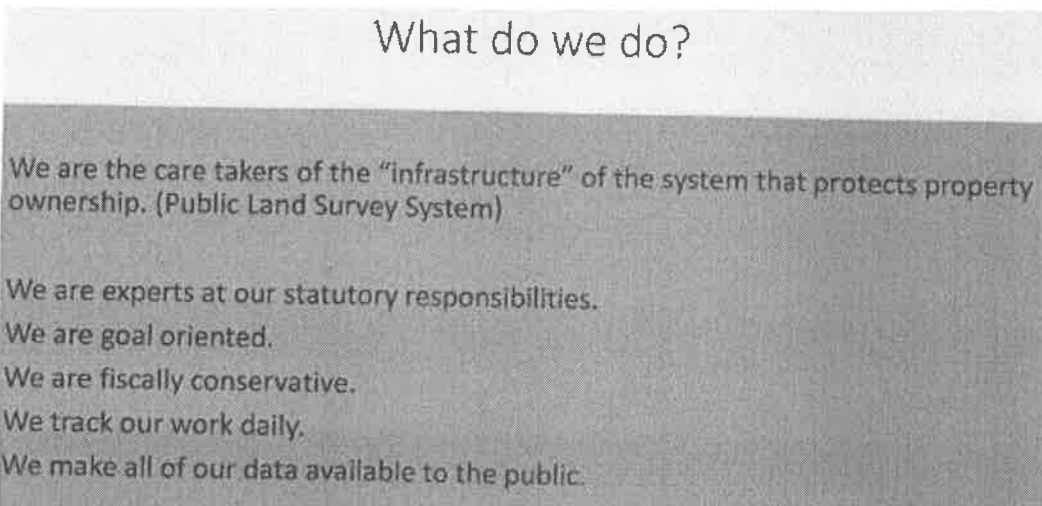
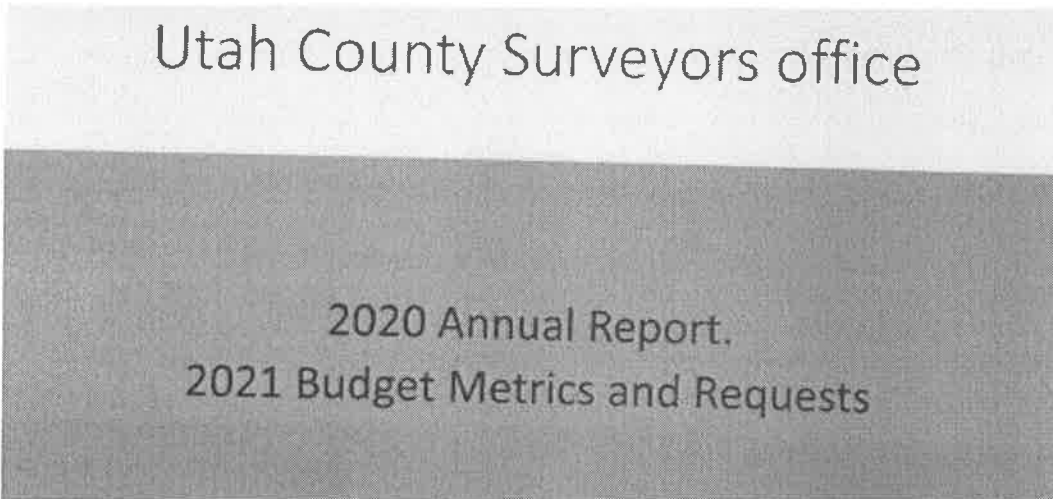
BOARD OF COMMISSIONERS OF UTAH COUNTY, UTAH
Public Budget Work Session Minutes – Utah County Surveyor's Office
October 15, 2020
2 | Page

HISTORICALLY, THE COUNTY SURVEYOR'S OFFICE ORIGINATED IN 1898 – THAT'S AS FAR BACK WE CAN TRACE IT ANYWAY – BUT THE LAST 75 YEARS FROM ABOUT THE MID 1940'S TO THE PRESENT DAY, THE OFFICE OF THE COUNTY SURVEYORS HAS BEEN BASICALLY 3 COUNTY SURVEYORS. THE ONE COUNTY SURVEYOR THAT WAS HERE FOREVER AND HE DID SOME AMAZING THINGS THAT WAS REALLY PROGRESSIVE IN NATURE FOR THAT TIME FRAME AND IT'S AMAZING THAT PEOPLE STILL TODAY THAT BRAG ABOUT HOW GREAT THIS OFFICE IS DON'T REALIZE THE HISTORY OF HOW THAT ALL CAME ABOUT. IT CAME ABOUT STARTING CLEAR BACK IN THE 40'S, 50'S AND 60'S. WHAT I'M GETTING AT HERE, THE DEPUTY SURVEYOR UNDERNEATH THAT COUNTY SURVEYOR WHEN HE RETIRED WAS THE COUNTY SURVEYOR THAT I FIRST STARTED WORKING FOR WHEN I STARTED IN 1980. AND HE IN TURN WAS THE DEPUTY SURVEYOR TO THAT ORIGINAL SURVEYOR THAT I'M BRAGGING ABOUT A LITTLE BIT AND THAT SURVEYOR I STARTED WORKING FOR IN 1980. HE WAS VERY PROGRESSIVELY MINDED. I STARTED AGAIN IN 1980 AND IN 1990 HE SENT ME BACK TO SUNNYVALE, CALIFORNIA HEADQUARTERS OF TRIMBLE NAVIGATION AND TRIMBLE NAVIGATION WAS THE FIRST MAJOR COMPANY OR CORPORATION THAT GOT PERMISSION FROM THE FEDERAL GOVERNMENT BASICALLY FROM THE DEPARTMENT OF DEFENSE, TO UTILIZE SATELLITE TECHNOLOGY FOR SURVEYING PURPOSES AND UTAH COUNTY WAS THE FIRST GOVERNMENT ENTITY IN THE STATE OF UTAH TO ACQUIRE GPS TECHNOLOGY. THIS IS IN 1990. THERE WAS ONE PRIVATE ENTITY DOWN ON THE SOUTHERN END OF THE STATE THAT HAD IT, BUT UTAH COUNTY WAS THE VERY FIRST GOVERNMENT ENTITY. AND BACK IN THAT DAY THE COUNTY INVESTED ABOUT \$110,000 IN THIS GPS EQUIPMENT. IT AMOUNTED TO THREE LARGE BOXES AND THEY WERE HEAVY, BULKY, AWKWARD. YOU PUT THEM ON YOUR BACK AND YOU HIKED UP THE HILL OR WHEREVER YOU'RE GOING AND THEY WERE BASICALLY SATELLITE RECEIVERS. IN ADDITION TO THE RECEIVERS THEY HAD ANTENNAS. YOU HAD A TRIPOD TO PACK. THERE WAS A LOT TO BE ABLE TO GATHER THE GPS DATA AND WE DID THAT FOR A NUMBER OF YEARS. IT WASN'T JUST ON THE BACK. IT WASN'T ON YOUR PHONE OR YOUR WI-FI - THIS OBVIOUSLY PREDATED THE PHONE, THE CAR GPS, OR BOAT GPS. WE WERE LITERALLY PIONEERING THE TECHNOLOGY. WE WERE EXPERIMENTING WITH THINGS THAT TRIMBLE NAVIGATION WASN'T EVEN SURE THAT IT WOULD DO. WE WERE TRYING TO BE PROGRESSIVE THAT WAY AND THESE THINGS I'M TALKING ABOUT ARE THINGS THAT WERE LATER ABLE TO CREATE THE TECHNOLOGY TO DO BUT BECAME AN UPGRADE TO THESE BIG BULKY RECEIVERS.

I'LL BE HONEST WITH YOU, WHEN I WAS BACK THERE IN 1990 TO SUNNYVALE, CALIFORNIA TO LEARN ABOUT THIS, I WENT KICKING AND SCREAMING. SHORTLY AFTER THAT TIME FRAME WE BECAME A LITTLE MORE PROGRESSIVE WHEN SOME OF THE OTHER GPS TECHNOLOGY CAME OUT AND WE FOUND OUT WE COULD BE MORE MOBILE AND NOT HAVE TO PACK THESE BIG BULKY RECEIVERS AROUND. IT WAS AROUND THAT TIME THAT I WAS FORTUNATE TO HIRE A PERSON BY THE NAME OF ANTHONY CANTO. MR. CANTO IS A VERY INTELLIGENT MANS. HE'LL BE A GREAT COUNTY SURVEYOR. HE ALWAYS HAS BEEN PROGRESSIVELY MINDED. I WOULD ASK THE COMMISSION TO CONTINUE AS MUCH AS YOU POSSIBLY CAN TO GIVE HIM THE SUPPORT AND THE VENUES WHEN IT COMES TO TECHNOLOGICAL ADVANCES. I GUESS IN

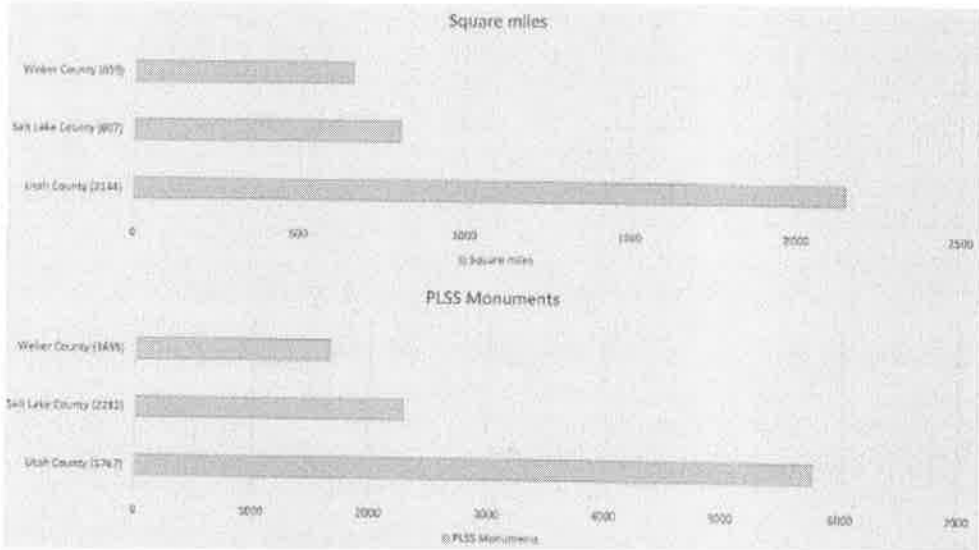
ESSENCE THE MOST IMPORTANT THING THAT I'VE DONE IN MY 40-YEAR CAREER AND PARTICULARLY IN THE LAST 10 YEARS AS THE COUNTY SURVEYOR IS TO HIRE THIS GUY. WE'VE BEEN ABLE TO STAY UP WITH WHAT'S GOING ON. I KNOW AMELIA'S OFFICE HAS DONE SOME AMAZING THINGS WITH HER OFFICE WITH TECHNOLOGY AND HER PROCEDURES AND WE'VE BEEN TRYING TO DO THAT ALL ALONG. I JUST WANT THIS BODY TO UNDERSTAND THAT, SO I NEED YOUR COMMITMENT. I'M GOING TO TURN THE TIME OVER TO HIM.

ANTHONY CANTO, CHIEF DEPUTY COUNTY SURVEYOR – (gave presentation)

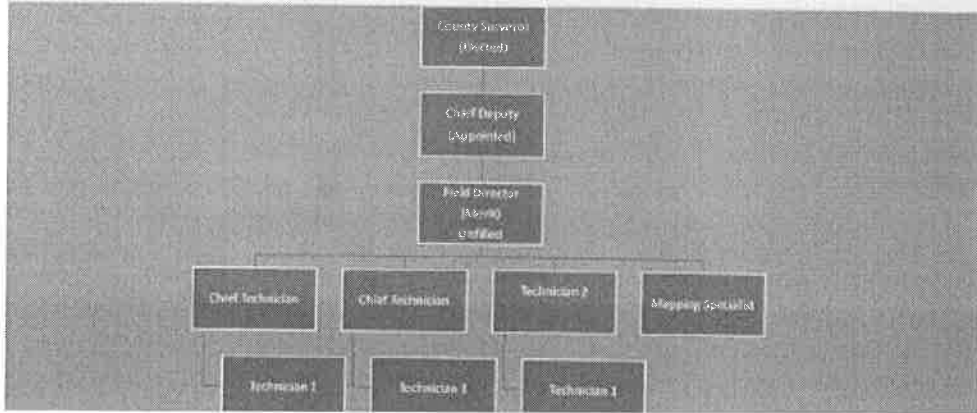


BOARD OF COMMISSIONERS OF UTAH COUNTY, UTAH
 Public Budget Work Session Minutes – Utah County Surveyor’s Office
 October 15, 2020

4 | Page

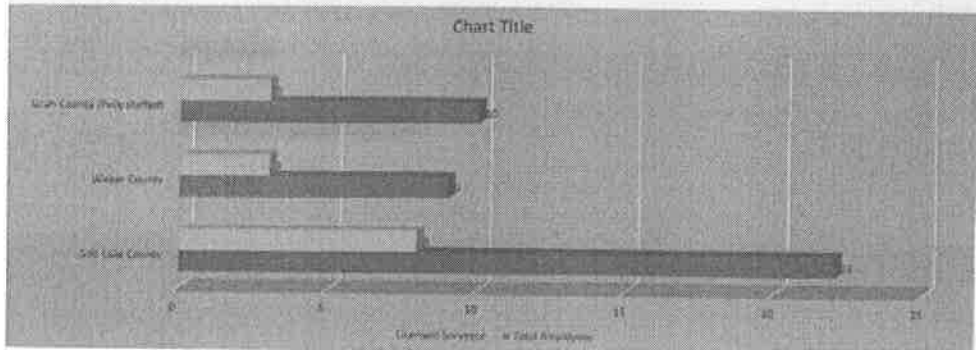


Utah County Surveyors Staffing

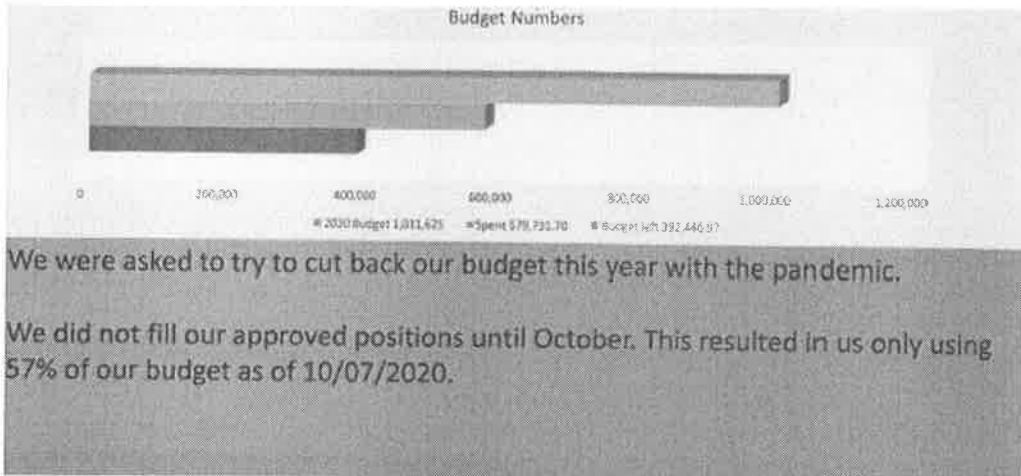


With the help of our commission we were able to get properly staffed at the tail end of 2020.

In 1980 the Surveyors office employed 13 individuals. By staying on the cutting edge of technology we have been able to cut our need for employees. If we stay up to date with technology, we feel like we are staffed at a level we can keep up with Utah Counties growth.



BOARD OF COMMISSIONERS OF UTAH COUNTY, UTAH
Public Budget Work Session Minutes – Utah County Surveyor’s Office
October 15, 2020
5 | Page



COMMISSIONER AINGE – THE FIELD DIRECTOR POSITION – IT’S STILL OPEN?

GARY RATCLIFFE– YES, WE’RE JUST TALKING ABOUT THE CREW. JUST TO MAKE A POINT WITH THAT. THE PRIMARY RESPONSIBILITY OF FIELD DIRECTORS IS TO TAKE A LOT OF THE OF THE WORKFLOW OFF OF ANTHONY CANTO AND ME. A LOT OF THE THINGS THAT WE WOULD LIKE TO BE DOING AS FAR AS EDUCATION REGARDING THE PUBLIC MINE SURVEYS AND THAT HELPS PREVENT SOME OF THE DAMAGES. SOME OF THAT IS ON HOLD BECAUSE WE’RE DOING SO MUCH WORK WITH THE FIELD CREWS AND THE DAY-TO-DAY OPERATIONS THAT WE CAN’T BE EFFECTIVE IN ALL ARENAS. THAT FIELD DIRECTOR WILL BE EXCLUSIVELY RESPONSIBLE FOR THE DAY-TO-DAY OPERATIONS.

ANTHONY CANTO (continued presentation)

2020 Metric
Protect boundaries through the protection of PLSS corners in developments.

2020 Anticipated outcome
In accordance with the newest state code in the County Surveyor’s statute our goal was to protect as many corners as possible from destruction during the construction process.

2020 Actual outcome
Through our corner tying process as well as an education campaign we were able to successfully get 14 monument excavation permits filled out and paid for. This protected the public by protecting the private property rights of approximately 6000 parcels that would directly or indirectly tie to those 14 monuments.

This protection brought in \$2900 in revenue with an additional \$2100 if our current fee schedule would have been adopted sooner. In addition to that, the protection saved us approximately 14,000 dollars in labor costs.

Alternatively we found or had reported 54 obliterated monuments with no permitting. We replaced these a cost of approximately \$54,000 in labor.

This was accomplished on a bare bones crew. We had two employees leave for better opportunities and with the pandemic we waited to fill 3 of our positions for 7 months and 2 of our positions for 3 months to help with budgetary issues facing the county.

COMMISSIONER AINGE – REMIND ME ON HOW THIS REVENUE IS GENERATED AND FROM WHOM ON THE \$2900?

GARY RATCLIFFE - IT’S \$400 PERMIT PER MONUMENT AND THEN THAT COMPANY WHO TAKES THAT OUT, WE GO OUT AND WE’LL MARK WHERE THE

BOARD OF COMMISSIONERS OF UTAH COUNTY, UTAH
Public Budget Work Session Minutes – Utah County Surveyor's Office
October 15, 2020
6 | Page

POSITION GOES BUT THEY ARE RESPONSIBLE FOR THE REPLACEMENT SO THAT BURDEN DOESN'T FALL ON THE COUNTY.

IT IS BY STATE LAW AND COUNTY ORDINANCE IF THEY EVEN WORK WITHIN 30' OF ONE OF THESE MONUMENTS, THEY PULL A PERMIT.

ANTHONY CANTO – THE PROBLEM WE WERE FINDING THOUGH IS THAT THE PENALTY FOR IT WAS SO LOW THAT THEY WOULDN'T PULL A PERMIT BECAUSE IT WAS COSTING THEM MORE TO WAIT ON THE PERMIT.

GARY RATCLIFFE - SO, IT'S PROGRESSIVE NOW TO WHERE IT CAN GET UP TO \$50,000 FOR EACH MONUMENT PULLED AND WE HAVE A COMMITMENT FROM THE ATTORNEY'S OFFICE TO PRACTICE ON THIS.

ANTHONY CANTO (continued presentation)

2021 metric

Keep up with the destruction of survey monuments U.C. 17-23 (replace all monuments within 14 days of discovery)

This has been our biggest frustration through out the years.

Construction has not slowed down, and the destruction of our monuments is still up. We had high hopes for 2020 to "catch up" on this work and try to get ahead of the contractors. Unfortunately with the pandemic we were asked to try and save the county some money, so we opted not to fill approved positions until October. That coupled with 2 of our current employees leaving for better pay we were stuck with a bare bones crew. We worked to get as much of this done as we could, but we fell a little bit behind. With the new hires we have set a goal to hit this hard and replace any obliterated (destroyed) monument within 14 days of discovery.

2020 Metric

Record of Survey plat review and Final Local Entity Review U.C. 17-23-17 & 17-23-20

2020 Anticipated Outcome

Review all ROS and FLEP plats

2020 Actual Outcome

As of 10/05/2020 we have reviewed 395 Record of Survey plats and 18 Final Local Entity plats.

Usually the end of the year causes a large number of plats to be filed. We anticipate around 500 ROS plats by the end of the year.

BOARD OF COMMISSIONERS OF UTAH COUNTY, UTAH
Public Budget Work Session Minutes – Utah County Surveyor's Office
October 15, 2020
7 | Page


2021 metrics

ROS plat review and FLEP plat review U.C. 17-23-17 (14 days from receiving date to make available online.)

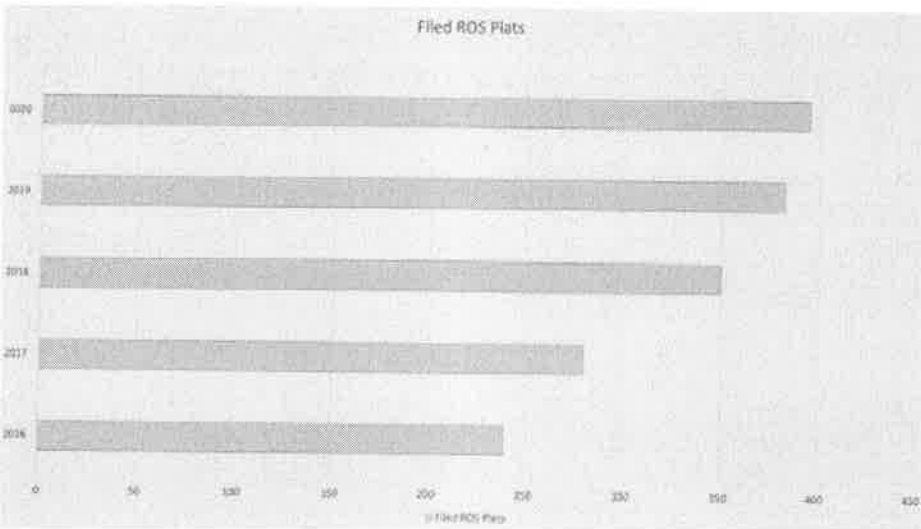
Utah County Surveyors office is the repository for all Record of Survey plats according to Utah State code 17-23-17. Every survey performed that shows a boundary requires a ROS plat to create a public record of the work performed. Our office does a cursory review of these plats as well as houses them and makes them available online. Between 01/01/2020 and 10/05/2020 we have reviewed 395 of these plats. We expect another 150-200 by the end of the year as well as an increase in these in 2021.

This is a necessary function that makes ROS plats available to both the private surveyor as well as the public.

A county assigned filing number on a ROS plat is a state requirement to record any boundary line agreement. U.C. 57-1-45



With the new state code requiring this filing number our office must be very responsive in meeting our mandates with reviewing and filing these plats in a timely manner.



2020 Metric

Make all field data electronically discoverable and available to the public

2020 Anticipated Outcome

Create updated tie sheets as deliverables to the public.

2020 Actual Outcome

All information and survey data collected has been made as a deliverable and made available online.

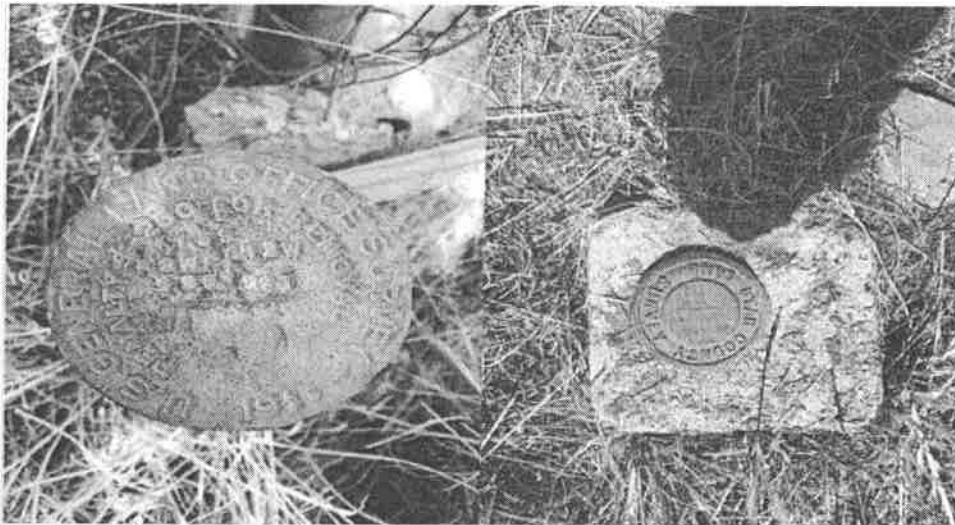
2021 metric Re-visit, Re-tie, Re-observe and Re-elevate 650 monuments

- The number one function of the Utah County Surveyors office is the protection of the Public Land Survey System. It is the backbone or infrastructure on which all property is based.
- Our office provides necessary data to the public in the form of section "Tie sheets"



We provide coordinate data in 2 different horizontal datums as well as elevation data in North American Datum of 1929 (NAVD 29). We are currently updating our vertical system to (NAVD 88) systematically while performing routine maintenance of our tie sheets.

650 monuments completed with all our other responsibilities is a hefty task but fully staffed we believe we can do it.



2020 Metric

Adequately and Professionally keep up with requests made by other county departments

2020 Anticipated Outcome

Public Works and Community Development Require assistance periodically throughout the year.

2020 Actual Outcome

Helped these other departments out during the year on different projects that would include topo surveys, road right of way stake out, gun range survey, Payson canyon re-alignment, County subdivision checks, plat review, County property boundary surveys and the creation of legal descriptions.

2021 metric
Adequately keep up with requests by other county departments. (15-day turnaround on all projects)

- We are called upon to help other county departments. These include things like;
- Utah County Property Surveys
- Topographic surveys for design
- Tax parcel sales
- Plat review for zoning
- Subdivision checks in unincorporated Utah County.

2020 Metric
Identification of original PLSS corners in outlying areas U.C. 17-23-1(4) U.C. 17-23-16

2020 Anticipated Outcome
Identify old original government monuments that control private or state lands.

2020 Actual Outcome

These old original stones and pipe and cap surveys were performed at least 100 years ago. This makes them challenging to find. It also makes it imperative that we continue the campaign to track these down and make a record of them. Every year that goes by makes it harder and harder to identify these. In current years we have found monuments that are almost unrecognizable.

With our bare bones crew we were able to meet our department goal and recover 26 monuments in Township 10 South, Range 5 East and 6 monuments in Township 10 South, Range 2 West.

2021 metric
Find and re-survey 30 corner monuments in Township 10 South, Range 3 East.

Utah County has always been progressive in the recovery of our monuments. We are the best county to work in because of this.

In Township 10 South, Range 3 East, we found a handful of original monuments in early 1980's and created NAD 27 coordinates on them. They have not been visited since, they have not been re-tied or been observed with GPS technology.

We will go in and find, update and survey at least 30 of these monuments. This will keep us from getting behind and "losing" these monument positions.

GARY RATCLIFFE – EVERYTHING THAT WE DEAL WITH WHEN WE TALK ABOUT THESE MONUMENTS HAS TO DO WITH PRIVATE LAND AND STATE LAND. AS A SUBSIDIARY OF THE STATE OF UTAH WE WILL TRY TO IDENTIFY AND PROTECT THE STATE'S INTERESTS AS WELL BUT PRIVATE LAND IS FIRST.

ANTHONY CANTO (continued presentation)

2021 metric

Meet with and educate 12 entities on our monument excavation permits.

While unincorporated county is shrinking year by year, cities are expanding, and construction is everywhere. This construction obliterates (destroys) our monuments. We did a good job in 2020 by updating our county ordinance and fee schedule to help combat this. However, with our bare bones crew we have struggled in 2 areas, enforcement and education.

We have a goal to meet with at least 12 entities about the importance of our system as well as the mechanisms that have been put in place to protect these through our excavation permit.

Entities we intend to focus on are cities, large contractors and colleges.



2021 metric

Create 2 new Township re-survey plats in 2011 adjustment format. (New format)

This is a new goal that was not on our radar. We had intended to upgrade our entire system in 2022 when the new datum was introduced. Unfortunately, the National Geodetic Survey (NGS) has decided to push this back until at least 2025.

We have decided to do a systematic update to our current system (NAD 83 HARN) and upgrade this to (NAD 83 2011 adjustment)

This update will put us on the same system that is broadcasted by the State AGRC VRS network that is widely utilized. This will include a vertical datum update that will be in compliance with the newly introduced FEMA flood plane maps.

We will publish at least 2 Township re-survey plats in the new format with all the newly observed data. This will be a great improvement to our current system, and we will do it through normal maintenance as to lessen the burden on the taxpayer.

2021 metric

Keep crews educated on new techniques and procedures by having quarterly meetings.

Surveying is a dynamic field that requires training on new legislation, technology and industry standards.

With the new crew members and large turnover in our department in 2020 we will hold a class on these issues held on January 25, April 19, August 9, October 18.

This will keep our crews productive as well as give the crews the ability to tell management of anything in current procedures that may need to be addressed.

This will create a good working environment that allows improvement in all areas.

New asks for 2021 budget

We only have one major ask for 2021.

Trimble S5 robotic total station.

"Robots" are the industry standard for line of sight surveying.

Creates speed with the ability to take shots quickly with out waiting on satellite coverage.

Creates safety by allowing our personnel to spend less time in busy intersections.

Creates a more productive crew by reducing the number of personnel on jobs where the robot is utilized.

Video of S5 on next slide.

RUDY LIVINGSTON – IS THERE ANY FUNDING IN THAT MONUMENT PRESERVATION FUND FOR PURCHASING?

GARY RATCLIFFE – THE PHRASE 'PRESERVATION FUND', HAS BEEN THERE FOR EMERGENCY PURPOSES AND WE'VE ALREADY UTILIZED IT ONE TIME. LET ME CLARIFY – A COUPLE OF YEARS AGO ONE OF OUR GPS SYSTEMS WENT DOWN HALFWAY THROUGH THE YEAR AND IT'S TOUGH TO GO TO THE COMMISSION AND SAY WE NEED \$30,000 FOR A NEW GPS SYSTEM ASAP WE WERE ABLE TO DRAW A PART OF THAT \$30,000 FROM OUR MONEY PRESERVATION FUND. THERE'S NOT A LOT OF MONEY IN THAT. THERE'S NOT A LOT THAT GOES INTO IT.

RUDY LIVINGSTON – WHERE DO THE FUNDS COME FROM?

BOARD OF COMMISSIONERS OF UTAH COUNTY, UTAH
Public Budget Work Session Minutes – Utah County Surveyor's Office
October 15, 2020
12 | Page

GARY RATCLIFFE – WHEN THE \$400 PERMITS ARE TAKEN OUT, THERE IS A RECORDS SURVEY AT \$20 EACH AND THAT \$20 GOES INTO THE PRESERVATION FUND.

COMMISSIONER LEE – NEED TO HAVE A CONVERSATION OUTSIDE OF THIS MEETING TO DETERMINE THE USE OF THE EMERGENCY PRESERVATION FUND.

Trimble S5 robotic total station (\$25,433.10)



COMMISSIONER AINGE – THIS IS GREAT. YOU DID EXACTLY WHAT WE ASKED HERE.

GARY RATCLIFFE – NEXT YEAR WE WILL EVEN DO BETTER. WE'VE CREATED GOOGLE DOCS THAT WE'VE SENT OUT TO THE CREWS, SO WE ACTUALLY HAVE THE CREW TRACKING THEIR WORK AS IT'S HAPPENING IN THE FIELD.

COMMISSIONER IVIE – THANK YOU GARY FOR ALL YOU'VE DONE TO BRING THE OFFICE FORWARD. ANTHONY, I'M EXCITED TO SEE WHAT YOU'LL DO IN THE FUTURE.

PUBLIC COMMENTS

NO PUBLIC COMMENTS

In compliance with the Americans With Disabilities Act, individuals needing special accommodations (including auxiliary communicative aids and services) during this meeting should notify Alice Black at (801) 851-8111 at least three days prior to the meeting.

BOARD OF COMMISSIONERS OF UTAH COUNTY, UTAH
Public Budget Work Session Minutes – Utah County Surveyor's Office
October 15, 2020
13 | Page

DocuSigned by:

Tanner Ainge

TANNER AINGE
Commission Chair

ATTEST:

DocuSigned by:

Alice Black

Deputy Clerk/Auditor