

# The UCLS Newsletter



*The UCLS Newsletter  
is published monthly by the*

**Utah Council of  
Land Surveyors**  
PO Box 1032  
Salt Lake City, UT 84110

**Phone / Fax:**  
801-964-6192

**Website:**  
[www.ucls.org](http://www.ucls.org)

## IN THIS ISSUE:

Page 2.....Board & Committee  
Page 3.....Tricks of the Trade  
Page 4.....Salt Lake County Sur-  
veyor Letter  
Page 5.....Forbes  
Page 6.....Bureau of Labor Statis-  
tics  
Page 7.....Chapter Reports  
Page 8.....FEMA Letter  
Page 9.....UGIC GPS Network  
Page 10.....Historical Data

“Freedom is never free.”  
-Auther Unknown

## What is it?

Do you recognize this prominent and very relevant monument? Need a hint? Thought not! Correctly identify the monument and its location and you may be eligible for a free luncheon at your next chapter meeting. Answers may be emailed to [smerrill@ucls.org](mailto:smerrill@ucls.org). The winner will be determined by the earliest received date and its time of response. **In This Issue:** we feature a new addition to our Newsletter titled “Tricks of the Trade.” Surveyor Sam, who asked to remain anonymous, submitted his/her first article of suggestions that may improve your work. We echo Surveyor Sam’s invitation for all member to contribute to the betterment of the profession.



Each month, the UCLS publication committee invites four members to participate in the “getting to know our members” section by completing a standard template. Unfortunately, all four members who were asked to be featured in this month’s Newsletter declined our invitation.

The office of the Salt Lake County Surveyor invites you to visit their new website and see the new information that has been made available; Discover how you compare, financially, with the rest of the country by reviewing the latest Bureau of Labor Statistics; Various Chapter reports; An invitation from NGS to participate in their new and improved OPUS program; and notification from AGRC regarding changes to the state’s VRS program.

Do you have a picture to share? We invite you to share charismatic photos of yourself and/or coworker, panoramic images of Utah’s scenic wonders, or pictures of survey related tools and equipment. Additionally, we need interesting and unique descriptions or survey related stories to share with our membership. Remember, if you do not participate you have no right to complain. Please let us know your thoughts, recommendations, suggestions, or complaints.

The UCLS Newsletter is published monthly by the Utah Council of Land Surveyors (UCLS), as a service to the Land Surveying profession of the state of Utah. The publication is provided to UCLS members and similar organizations on a complimentary basis. The Newsletter is not copyright protected, therefore articles, except where specifically copyright noted, may be reprinted with proper credit given. Articles appearing in the Newsletter publication do not necessarily reflect the viewpoint or endorsement of UCLS, its officers, Board of Directors, or the editor.

Contributions are encouraged. Articles, Advertisements, Pictures, and Comments may be submitted to UCLS at [ucls@ucls.org](mailto:ucls@ucls.org) or [uclsforesights@ucls.org](mailto:uclsforesights@ucls.org)

**Utah Council of Land Surveyors Executive Board and Committees****UCLS Executive Board 2013****State Chair**

Ernest Rowley (GS)  
3648 W. 6050 S.  
Roy, UT 84067  
(801) 399-8353  
erowley@co.weber.ut.us

**State Chair Elect**

Kenneth Hamblin (CC)  
59 N. 2120 East circle,  
St. George, UT 84790  
(435) 673-6894  
khamblin@infowest.com

**Past State Chair**

Brad Mortensen (SL)  
3268 S. 930 W.  
Syracuse, UT 84075  
(801) 882-6385  
dmortensen@bushandgudgell.com

**NSPS Governor**

Steven Keisel (SL)  
604 S. Blossom Circle  
Fruit Heights, UT 84037  
(801) 468-2043  
skeisel@slco.org

**West Fed Representative**

Michael W. Nadeau (SL)  
5226 W. Ashland Rose Dr.  
Herriman, UT 84065  
(801) 569-1315  
mikenadeau.ucls@gmail.com

**Book Cliffs Chapter President**

Jerry Allred  
PO Box 605  
Duchesne, UT 84021  
(435) 738-5352  
jdallred@ubtanet.com

**Book Cliffs Chapter Representative**

David Kay  
85 S. 200 E.  
Vernal, UT 84078  
(435) 789-1017  
dkay@uintahgroup.com

**Color Country President**

Scott P. Woolsey  
43 S. 100 E. Suite 100  
St. George, UT 84770  
(435) 628-6500  
scottwoolsey@alphaengineering.com

**Color Country Chapter Representative**

Roger Bundy  
257 Prickley Pear Drive  
Washington, UT 84780  
(435) 673-2918  
rbsurveying@infowest.com

**Golden Spike President**

David K. Balling  
198 E. Shadowbrook Lane  
Kaysville, UT 84037  
(801) 295-7237  
dkballing@msn.com

**Golden Spike Chapter Representative**

Val Schultz  
2096 W. 5750 S.  
Roy, UT 84067  
(801) 399-8018  
vschultz@co.weber.ut.us

**Salt Lake Chapter President**

David Mortensen  
231 W. 800 S. Ste A  
Salt Lake City, UT 84101  
(801) 755-6891  
dmortensen@bushandgudgell.com

**Salt Lake Chapter Representative**

Dale Robinson  
12227 S. Business Park Dr., #220  
Draper, UT 84020  
(801) 523-0100  
drobinson@sunrise-eng.com

**Timpanogos President**

Dennis P. Carlisle  
867 S. Anna Ekins Lane  
Genola, UT 84655  
(801) 955-8144  
dennisc@focusutah.com

**Timpanogos Chapter Representative**

Jim Kaiserman  
1020 Sage Circle  
Heber City, UT 84032  
(435) 657-3222  
jkaiserman@co.wasatch.ut.us

**Administrative Secretary**

Susan Merrill  
PO Box 1032  
Salt Lake City, UT 84110  
(801) 964-6192  
srmerrill@ucls.org

**Chapter Vice Presidents:**

**Book Cliffs** John R. Slaugh  
jrs@timberlinelns.com  
**Color Country** J. Curt Neilson  
ncurt@cedarcity.org  
**Golden Spike** Chris B. Balling  
chris.balling@guestar.com  
**Salt Lake** Joe D. Richardson  
rsinc2002@hotmail.com  
**Timpanogos** Kevin Bishop  
kevin.oakhills@gmail.com

**Chapter Secretary/Treasurer**

**Book Cliffs** Arnelton T. Davis  
ndavis@sbt.net  
**Color Country** Todd Jacobsen  
todd.jacobsen@sgcity.org  
**Golden Spike** Travis Gower  
gwlsurvey@gmail.com  
**Salt Lake** Darlene Jeffreys  
ostaja@me.com  
**Timpanogos** Chad Poulsen  
chad@lei-eng.com

**Committees & Committee Chairs**

**Legislation** Doug Kinsman  
dkinsman@co.tooele.ut.us  
**Education** Dan Perry  
perrydl@uvu.edu  
**Publication** Steve Keisel  
Keith Russell  
svkeisel@gmail.com  
keith@ensignutah.com  
**Standards & Ethics**  
Matt Clark  
mountainlands@xmission.com  
**Membership** Unfilled  
**Public Relations** Trent Williams  
bluefishsud@gmail.com  
**Testing** Darryl Fenn  
dfenn@merid-eng.com  
**Workshop & Convention**  
James Olschewski  
Scott Woolsey  
jolschewski@utah.gov  
scottwoolsey@alphaengineering.com  
**Historical** K. Greg Hansen  
gregh@haies.net  
**Construction Survey**  
Lance Greer  
lgreer@wwclyde.net  
Russell Flint  
russ@flintutah.com

## TIRCKS OF THE TRADE

By: Sam Surveyor

I am writing this article as Sam Surveyor because I would like to share some ideas of what I have found that works without receiving criticism. Also, this is an invitation for other surveyors to contribute. If we learn to share and communicate, we will only become more professional.

As I look through my equipment, I see little things that help.

I have a **Manhole Lifter**, which is a 3 foot rod with a handle and a curved end that makes getting into a man-hole very easy. Before the lifter, I wedged a guard stake under the lid in order to get my hands under, and then would quickly lift the manhole lid. Once, the lid slipped and if it had not been for my wedding ring, I would have lost a finger. I had to use some pliers to re-shape the ring. Get yourself a lifter.

Often we need to open a monument lids. I hate these lids and think it is a crappy way to protect monuments. I remember how nice it was to see a survey monument installed flush with the pavement. I could go on but that's another story. When the lid is open and you find 2 feet of water, mud, and who know what else in the hole - how do you get it out? I have used a cup, but this was slow, and I could never get all the water out. I tried a turkey baster, but this was also slow, and the little hole became plugged. The best solution I have found is a **Big Sponge**. It gets all the water out fast. Try it.

Another little help is the **4-Way Pen**. I take a lot of notes and having a different color helps me keep things organized. If I'm talking to a client, I often explain that this blue line represents your property, this red line is the wall, and the green line is the old wire fence. This makes a better image than using just one color. I take down numbers in different colors. Additionally, the top end of my pen is a perfect stylus, and using it does not scratch my data collector screen.

Everyone knows about a foam tack ball and a bucket or bag of stakes. My revision is on the small pocket of the **Lath Bag**. I modified this to hold stakes and/or rebars. When working alone or with a GPS rover, I can easily carry this on my shoulder and it is most helpful.

There are a lot of tricks I have learned and would like to hear what you have learned. Take a moment and drop an email to UCLS.

I will write some more - so keep your ears open.

Surveyor Sam

### June What is it



The June edition of the UCLS Newsletter highlighted the wagon-odometer found in the Pioneer Museum of the Church of Jesus Christ of Latter Day Saints; located west of the Salt Lake Temple.

The following three members correctly identified the tool

John Halleck; June 4, 2013 8:31 AM

Lynn Curt; June 6, 2013 10:35 AM

Brad Daley; June 6, 2013 11:12 AM

John Halleck described the wagon-odometer as "William Clayton's odometer in the museum across the street to the west of temple square. Obviously, an odometer is related to surveying because it measures distance (and was used to provide the data for the map in William Clayton's "Emigrant's Guide"). Additionally, Brad Daley correctly indicated that it has significance as one of the first land measuring devices in Utah.

Many thanks to those who participated.



## SALT LAKE COUNTY SURVEYOR'S OFFICE

Reid J. Demman, P.L.S., *Salt Lake County Surveyor*

Phil G. Lanouette, P.E., *Chief Deputy*

2001 South State Street, N1500, PO Box 144575

Salt Lake City, UT 84114-4575

phone: (385)468-8240 Fax: (385)468-8258

Email: [Surveyor@slco.org](mailto:Surveyor@slco.org)

June 28, 2013

Fellow Surveyors,

The office of the Salt Lake County Surveyor continues to improve, enhance, and expand its website. We now have a new and improved interactive Survey/Monument Web Map at <http://surveyor.slco.org/JSAP/map/index.html>. This map works on all major internet browsers and mobile devices. Please contact us if you have any problems or suggestions on this new application.

The following data sets were recently added, and we invite you to look.

- Lot & Block Plats
  - Scanned images of the historical five and ten acre plats of Salt Lake City.
- Corner Reports
  - Records prepared and filed by professional land surveyors to document and perpetuate the physical position of public land survey corners they establish, and/or to identify errors of current public land corner records.
- Hand Tie Books
  - These books contain supporting information, sketches, and field notes regarding the status of survey monuments and their relationship to the corners of the Public Land Survey System between 1943 and 1996.
- Static Sheets
  - GPS derived observation sheets, collected between 1994 and 2002. They contain surveillance data and monument rubbings delineated by Point Name, Section, Township, and Range.
- Historical Roads
  - Scanned images of drawings and field notes from 1856 to 1975. These images include road, dedications, rights of way, utilities, and other road attributes. Information has been indexed by road name, township, range, section, date, survey type, and data source, including the "Bible"; which contains the original road and highway surveys from 1856 to 1915.

Our new website provides the user the ability to search multiple datasets using key words. Additionally, our monument reference sheets have been updated to include Latitude / Longitude coordinates and a geoid reference.

Please visit our website at <http://surveyor.slco.org/>, or call 385-468-8240 to schedule training, offer comments, or make suggestions.

Respectfully,

A handwritten signature in dark ink, appearing to read "Reid J. Demman".

Reid J. Demman, PLS  
Salt Lake County Surveyor



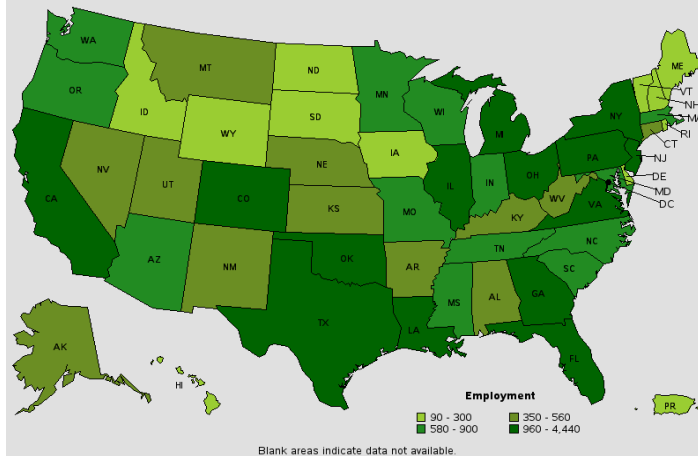
## Bureau of Labor Statistics – May 2012

### Occupational Employment and Wages

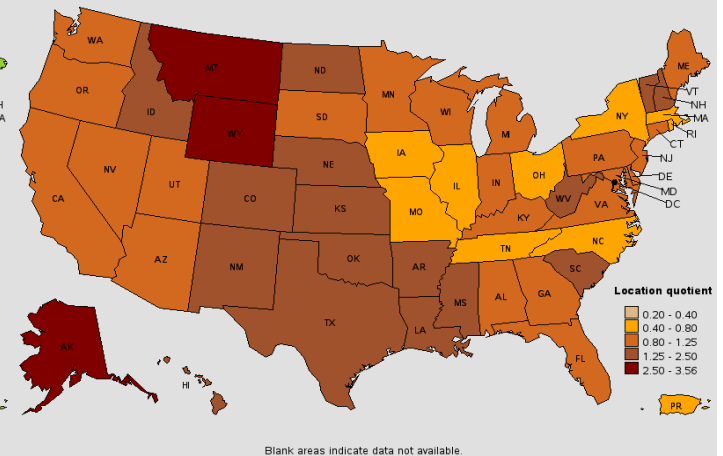
#### 17-1022 Surveyors

Make exact measurements and determine property boundaries. Provide data relevant to the shape, contour, gravitation, location, elevation, or dimension of land or land features on or near the earth's surface for engineering, mapmaking, mining, land evaluation, construction, and other purposes.

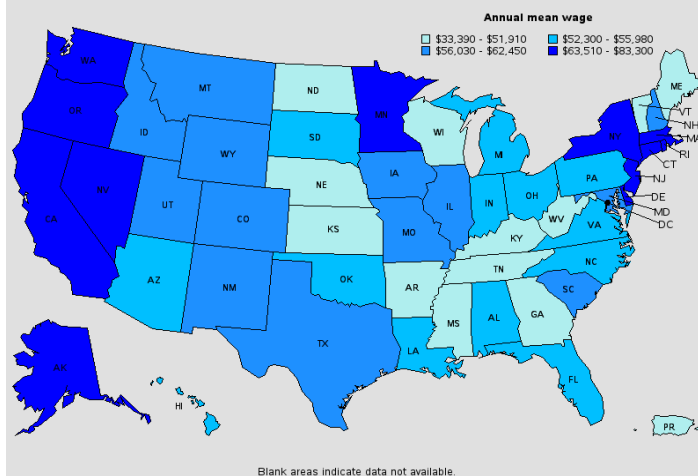
Employment of surveyors, by state, May 2012



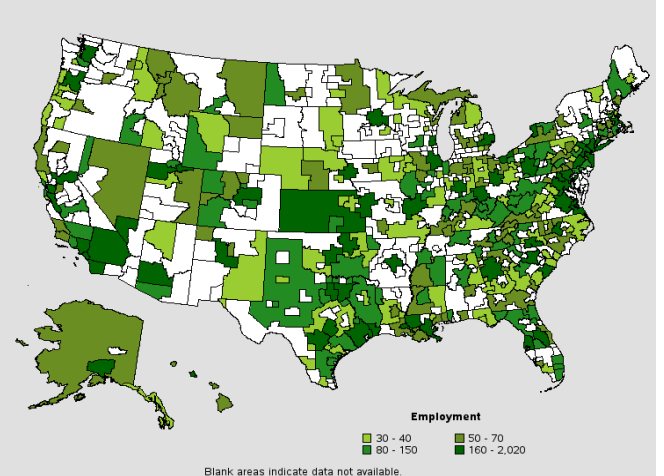
Location quotient of surveyors, by state, May 2012



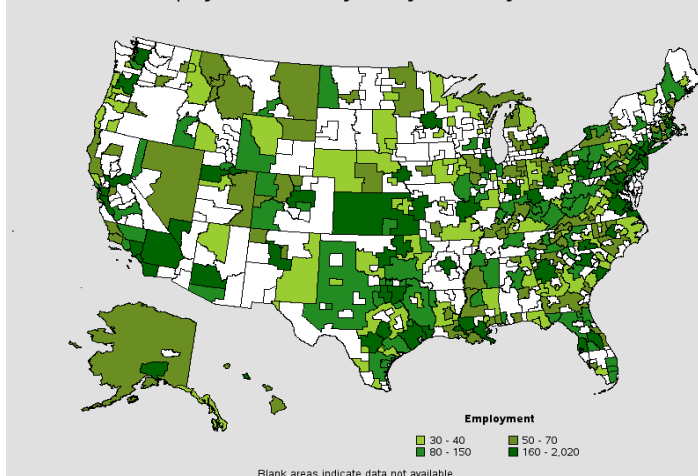
Annual mean wage of surveyors, by state, May 2012



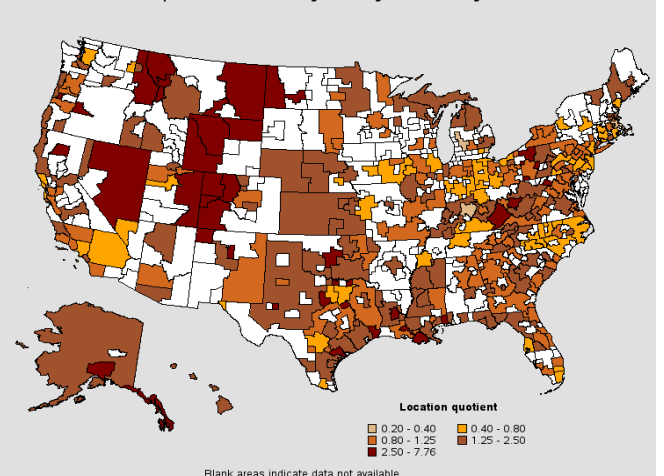
Employment of surveyors, by area, May 2012



Employment of surveyors, by area, May 2012



Location quotient of surveyors, by area, May 2012



### Salt Lake Chapter

By: David Mortensen

Hello all. Hope everyone has had a great spring and I hope a good summer is in store as well. We were excited to hear from Bill Rowley of National Title at a fun new location. I believe and hope all that were there took something back that should help them when reviewing and preparing ALTA surveys.

Next month (July), we are pleased to hear from Matthew Jensen, Attorney at Parr Brown Gee & Loveless, in which he will be speaking on the Nuts and Bolts of Water Rights. We are holding this meeting on July 11th at Joe Morley's BBQ. We moved this meeting to the second Thursday of July as Mr. Jensen had a conflict arise with our usual day. I am grateful that one of our members suggested this topic and presenter. Thanks for your involvement and we would love to get more ideas for topics and presenters. Please email me or any of your chapter officers if you have any thoughts.

We are excited to say that we have chosen a location for our August 15th BBQ. Dr. O. Roi Hardy Park, 12400 River Vista Drive (1000 West), Riverton Utah. This is located right next to the Jordan River on the Riverton side. Directions and more details will be provided in an invitation that should be coming soon. We are looking forward to being able to socialize with you and your families. Please mark this day on your calendar and we look forward to seeing you all there.

### Golden Spike Chapter

By: David Balling

On June 12, John Crofts the State Flood Plane Manager addressed our chapter. We met at Maddox in Brigham City and while we enjoyed the fantastic lunch, John talked about elevation certificates, LOMARs, and flood funding. Because of the major disasters (Katrina, Sandy) in the country and our presidents promising assistance, the funds at FEMA are gone, in fact they are in debt. The way to get out is to raise the flood insurance rate. Because mortgage lenders are required to have elevation certificates, we should see an increase in our business. If you would like to know more, John works at the state offices and is willing to answer your questions. I must say this was very helpful and delicious. As Val Shultz mentioned, "I've never had a bad steak at Maddox."

Our next meeting will be at 12:00 noon on the 17th of July, Doug Kinsman, the Tooele County Surveyor and

### Golden Spike Continued...

He will tell us the issues the committee is working on. I'm sure he will take suggestions. We will meet at the Iggy's Sports Bar in Centerville.

On August 14, at 12:00 noon we will meet at Javier's in Ogden on Harrison Blvd. We will be pleased to hear from Troy Langston about the newest technology in the field. If you have suggestions please drop us an email. We want to serve you.

Don't forget the upcoming Fall Forum - and it's never too late to get involved in UCLS. Be a member of a committee or better yet - plan to be an officer.

### News From NOAA

NOAA's National Geodetic Survey (NGS) is preparing to release for public use an optional, enhanced version of its popular Online Positioning User Service (OPUS), called OPUS-Projects. OPUS-Projects processes (relative to the network of GPS Continuously Operating Reference Stations (CORS)) and assembles GPS observation data collected at multiple stations on multiple days/sessions, ultimately combining all of these measurements in a least squares network adjustment to produce an optimal set of geodetic coordinates for all stations participating in a project.

Although OPUS-Projects greatly simplifies the processing and adjustment workflow, it is considerably more involved than (regular) OPUS. So, NGS will require anyone interested in using OPUS-Projects to first attend a "manager's" workshop which will train attendees on proper use of this utility. OPUS-Projects will eventually allow for publishing of a project's results into the NGS geodetic control database. Details about the public release of OPUS-Projects and related workshop opportunities are still evolving, but I expect that we can probably start offering training in Utah, in coordination with UCLS, as soon as sometime near the end of 2013.

For more information, contact Bill Stone of NOAA's National Geodetic Survey at [william.stone@noaa.gov](mailto:william.stone@noaa.gov) or 240-988-5919 (cell).

**FEMA**

# Online Letter of Map Change

## What is a Letter of Map Change (LOMC)?

If a property owner has evidence that their property has been inadvertently mapped in a Special Flood Hazard Area (SFHA), or flood hazard data needs to be revised due to man-made changes, a request to FEMA for a Letter of Map Change (LOMC) may be submitted. A SFHA is defined as the area that will be inundated by the flood event having a 1-percent chance of being equaled or exceeded in any given year. A LOMC reflects an official revision/amendment to an effective Flood Insurance Rate Map (FIRM). If the LOMC request is granted, property owners may be eligible for lower flood insurance premiums, or the option to not purchase flood insurance.

## What is the Online LOMC?

Beginning June 2013, citizens will be able to use Online LOMC as an alternative to filling out the MT-EZ, MT-1 or MT-2 paper forms. Citizens can use Online LOMC to submit and check the status of several LOMC applications online. Types of LOMCs include:

- [Letter of Map Amendment \(LOMA\)](#)
- [Conditional Letter of Map Amendment \(CLOMA\)](#)
- [Letter of Map Revision \(LOMR\)](#)
- [Conditional Letter of Map Revision \(CLOMR\)](#)
- [Letter of Map Revision-based on Fill \(LOMR-F\)](#)
- [Conditional Letter of Map Revision-based on Fill \(CLOMR-F\)](#)

## What are the benefits?

- Submit, pay, and upload supporting documentation for all LOMC requests through one single online platform
- Applicants may save information online and finish applying at their convenience
- Clear and intuitive interface makes applying user-friendly
- Frequent applicants can manage multiple LOMC requests online
- Applicants can check their application status in real-time
- More efficient communications with LOMC processing staff

### Contact Us

For more information about the Online LOMC tool, go to:  
[www.fema.gov/online-lomc](http://www.fema.gov/online-lomc)

For questions or troubleshooting, please call the FEMA Map Information eXchange (FMIX) at  
1-877-336-2627

### Who can use the Online LOMC?

Anyone, including community officials, home or property owners, their representatives, and professional surveyors and engineers, may submit a LOMC request using the Online LOMC tool. Certification by licensed engineering or surveying professionals is required for some supporting documentation, which may be scanned and uploaded by the applicant.

**RiskMAP**  
Increasing Resilience Together

# Forbes

## - High-Paying Blue-Collar Jobs

We tend to associate hefty paychecks with briefcases, neckties and lab coats – but it turns out there's plenty of money to be earned by those who sport hard hats and coveralls.

This may be surprising considering the gradual decline of union memberships over the years and the fragile state of America's workforce, but plenty of talented and skilled blue-collar workers earn six figures doing electrical work, repair jobs, and other labor-intensive trades.

Forbes combed through data gathered annually by the [Bureau of Labor Statistics](#), a division of the Labor Department, to find some of the highest-paying blue-collar jobs. The BLS culls its information from surveys it mails to businesses, and it releases its Occupational Employment and Wage Estimates data each spring. The figures are for 2012.

What defines a blue-collar job? *The American Heritage Dictionary* says, "Of or relating to wage earners, especially as a class, whose jobs are performed in work clothes and often involve manual labor." We took that definition and excluded work that is largely managerial or supervisory to compile our list of 10 high-paying blue-collar jobs.

### Here's our list of 10 high-paying blue-collar jobs:

#### 1. Elevator Installers and Repairers

Annual income (average): \$74,140  
Top 10%: \$106,450  
Total employed in field: 19,700

#### 2. Electrical and Electronics Repairers, Powerhouse, Substation, and Relay

Annual income (average): \$67,380  
Top 10%: \$88,790  
Total employed in field: 23,920

#### 3. Transportation Inspectors

Annual income (average): \$66,470  
Top 10%: \$111,780  
Total employed in field: 24,310

#### 4. Electrical Power-Line Installers and Repairers

Annual income (average): \$62,280  
Top 10%: \$89,020  
Total employed in field: 112,450

#### 5. Petroleum Pump System Operators, Refinery Operators, and Gaugers

Annual income (average): \$60,730  
Top 10%: \$83,040  
Total employed in field: 41,020

#### 6. Surveyors

Annual income (average): \$59,180  
Top 10%: \$90,920  
Total employed in field: 40,190

#### 7. Subway and Streetcar Operators

Annual income (average): \$58,220  
Top 10%: \$73,590  
Total employed in field: 8,750

#### 8. Rotary Drill Operators, Oil and Gas

Annual income (average): \$56,540  
Top 10%: \$84,390  
Total employed in field: 25,090

#### 9. Boilermakers

Annual income (average): \$55,830  
Top 10%: \$79,970  
Total employed in field: 17,660

#### 10. Aircraft Mechanics and Service Technicians

Annual income (average): \$55,690  
Top 10%: \$76,660  
Total employed in field: 119,160

### Perception Problem? What do you think?

### Number of Surveyors in the US

NSPS has compiled the following statistics based on information acquired from the [Bureau of Labor Statistics](#) and [NCEES](#).

The BLS statistics are from May 2012, and indicate that there are 40,190 professional surveyors employed in the U.S. The NCEES statistics from January 2012 indicate that 43 states plus District of Columbia (7), Guam (16), Puerto Rico (1087), and Virgin Islands (16) reported resident and non-resident licensees separately. The total number of licensees reported as "resident" is 34,598.

7 states (Arkansas, Delaware, Florida, Georgia, Indiana, Nebraska, and Vermont) did not segregate resident from non-resident licensees. The total number of licensees reported among those states is 6,638. The NCEES statistics indicate that 70 percent of all licensees are "resident." This would mean that of the 6638 licensees collectively in AR, DE, FL, GA, IN, and NE, 4,646 would be resident.

Combining the "reported" 34,598 resident licensees in the 43 states (plus the territories,) and the calculated 4,646 licensees in the other 7 states, the total number would be 39,245.

This compared favorably with the 40,190 reported by the BLS.

Therefore, it is safe to say there approximately 40,000 licensed professional surveyors in the U.S. based on the combined 2012 statistics from BLS and NCEES.





## **GPS Network Upgrade and Fee Increase**

This is an announcement from the Utah TURN GPS Network, managed by the Utah Automated Geographic Reference Center (AGRC):

We are pleased to announce that a system upgrade to The Utah Reference Network GPS software is planned for later this Summer. Preparations are currently being made to upgrade the solution server from a 32 bit to a 64 bit system which will provide more efficient processing and enable more concurrent users without bogging down the system.

Thorough testing and advanced notification will take place before going live with the new system.

With the upgraded software, we anticipate users will have more control over their device accounts. Additionally a new web application will allow all users access to status monitoring for the network.

The Utah Legislature appropriated funding to make this much needed upgrade possible but did so with the expectation that the system become financially self sustaining . With the latter in mind, the Legislature adopted an increase in subscription fees from \$400 to \$600 per year, which is still well below the national average. This fee increase will take effect for all subscription renewals on or after July 1, 2013.

AGRC also plans to move the TURN GPS Network spatial reference from NAD 83 (CORS 96) epoch 2002 to NAD 83 (2011) epoch 2010 during this upgrade. The positional difference of this adjustment varies between 0 and 3 cm for the vast majority of the state, so please be prepared to account for this adjustment.

Please relay this information to others using the GPS Network.  
Thank you for supporting TURN GPS and please contact me with any questions.

### **Sean Fernandez PLS**

State Cadastral Surveyor/Division Manager  
State of Utah AGRC  
1 State Office Building Room 5130  
Salt Lake City, Utah 84114  
[sfernandez@utah.gov](mailto:sfernandez@utah.gov)

## HISTORICAL DATA

*Prepared in accordance with the original survey made by Orson Pratt, Henry G. Sherwood and assistants, which survey was commenced August 2, 1847, and completed the same month.*

*The city was pioneered by the Mormon people at that time. Orson Pratt was the first of this group to walk over and evaluate the area as a city site, on the afternoon of Wednesday, July 21, 1847. The day following, July 22, he, with eight other horsemen, rode over the site and examined the surrounding lands as far north as the Hot Springs and some distance west of Jordan River.*

*On Friday, July 23, 1847, the main body of the Pioneers arrived on the city site and made camp in the area surrounding the present City and County Building location between 4th and 5th South and between 2nd East and Main Streets. There, in solemn religious ceremony, Orson Pratt as leader of the group dedicated the people and lands to the Lord and implored His blessings upon their labors. Various committees then were appointed to attend to different branches of business preparatory to putting in crops. Plowing commenced shortly afterward and that same day a dam was made in City Creek and modern irrigation in North America was initiated.*

*On Saturday, July 24, 1847, at 11:45 A.M., President Brigham Young and company arrived—a day late due to sickness.*

*Wednesday afternoon, July 28, 1847, President Brigham Young, accompanied by Apostles Heber C. Kimball, Willard Richards, Orson Pratt, Wilford Woodruff, George A. Smith, Amasa M. Lyman, Ezra T. Benson and Thomas Bullock, Secretary to President Young, designated the site for the Temple Block and, on motion of*

*Orson Pratt, unanimously voted to erect a temple thereon.*

*That evening, the Pioneers assembled on the Temple site and voted unanimously to build the Temple there and to survey a city to be divided into lots 10 by 20 rods each, exclusive of the streets, and into blocks of 8 lots each, with 10 acres to each block, and 1¼ acres to each lot; that streets be 8 rods wide, including sidewalks, and intersecting at right angles; that the houses be built in the centers of lots and 20 feet back from the sidewalk line; and that there be four 10-acre squares, located in various parts of the city, to be set aside as public grounds.*

*On Saturday, August 7, 1847, four days after the city survey commenced, the Church Leaders, for and in behalf of the people and themselves, and without compensation, commenced the distribution of city blocks and lots as "inheritancies." These building lots were distributed equitably among the people with the proviso that they were to be used for home or business building only and not to be sold or otherwise disposed of for pecuniary profit.*

*One 10-acre block, later known as the Sixth Ward (or Pioneer) Square, was designated as the site for erection of a temporary fort in which the people would reside until individual homes could be built in various parts of the city. Work on the fort was commenced August 11, 1847.*

*On Saturday, August 14, 1847, a general meeting of the Pioneers was held at which the city was given the name: "The City of the Great Salt Lake, Great Basin, North America."*

*When the new city was incorporated, on March 26, 1851, its name was changed to Great Salt Lake City.*

5	Benj. Hawkins
4	Sylvester Earl
113	
3	Abel John Lamb Gheen
2	Stephen Winchester

STREET

5 6 7

### PIONEER MAP

# GREAT SALT LAKE CITY

## GREAT BASIN — NORTH AMERICA

