



Overview of *Surveyor's Office* Portfolio

Presented October 20, 2020

INTRODUCTION

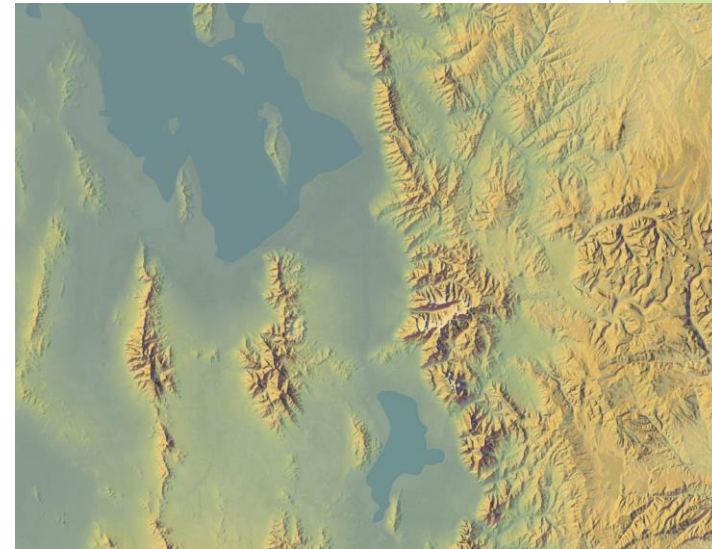
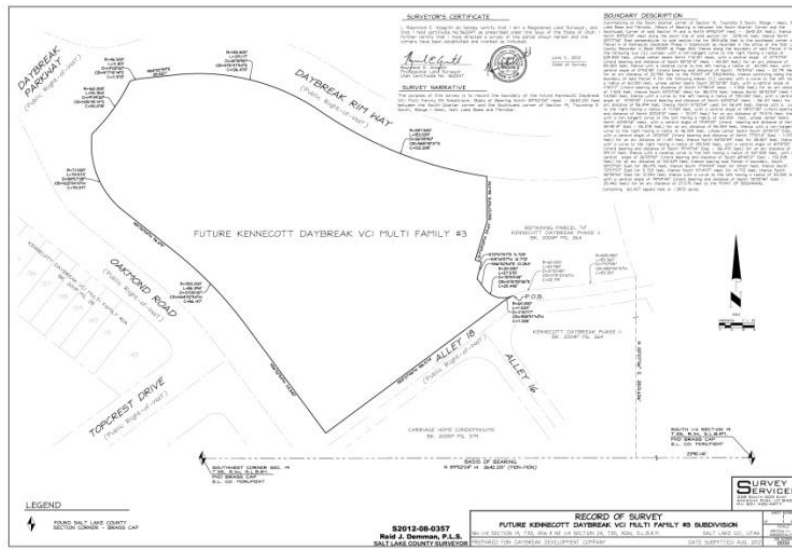
Salt Lake County Surveyor's Office provides numerous statutory and professional services to the County and public. Additionally, a priority is placed on promoting efficient use of the office as a Countywide resource. The Surveyor's Office utilizes specialized technological infrastructure and a number of shared Countywide IT resources to provide services.

Surveyor's budget is funded by both the Tax and General Fund, 18% and 82% respectively.

- ▶ Categorical breakdown of the Surveyor's budget is:
 - ▶ 85% Personnel
 - ▶ 8.5% Operations
 - ▶ 6.5% Indirect Costs

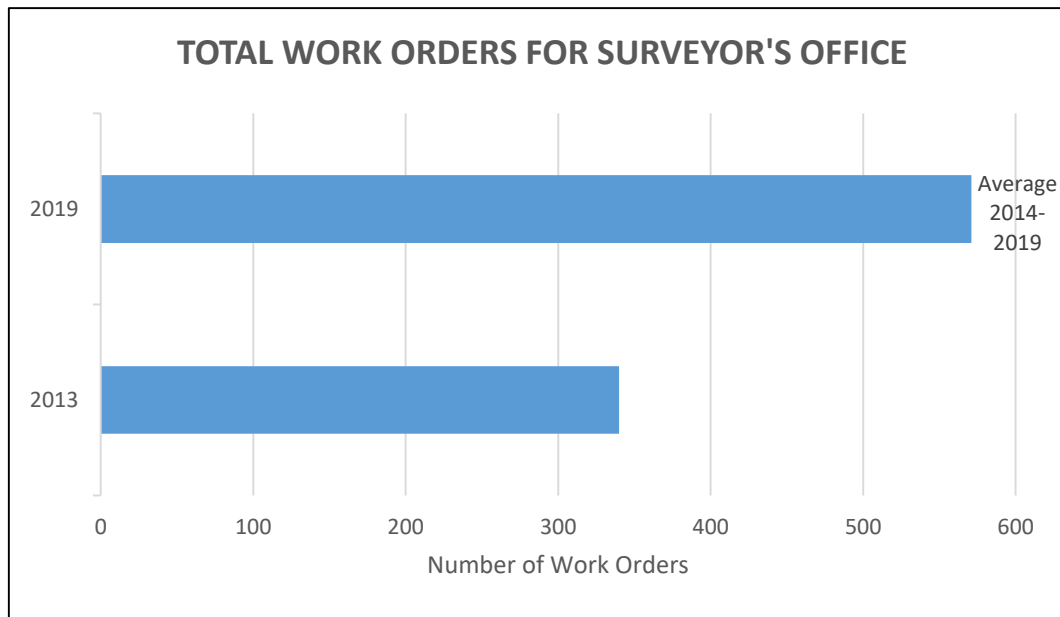
PRIMARY STATUTORY FUNCTIONS

- ▶ Maintain Public Land Survey System (PLSS)
- ▶ Perform or arrange for all survey work for the County
- ▶ Review, maintain and make available to the public all private survey records
- ▶ Provide maps to County offices



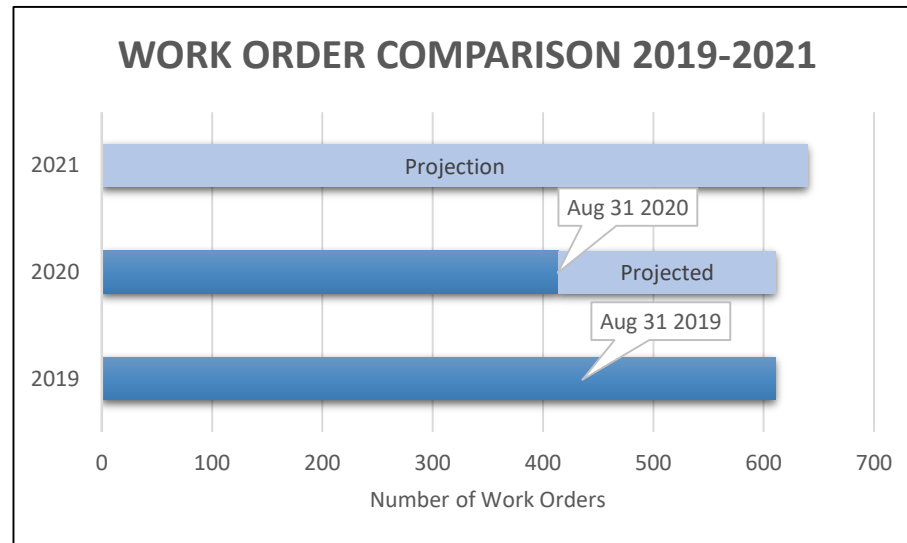
PERFORMANCE MEASUREMENT 2013-2019

- ▶ A key performance measure is the number of work order requests from both the public and government entities. Since year ending 2013 through 2019, the Surveyor's Office has averaged 570 work order requests per year, which reflects a 68% increase use of Surveyor's resources.



2021 WORKLOAD PROJECTIONS

Work requests through August 2020 have decreased 9.5% when compared to the same timeframe in 2019. We believe this slight reduction can be largely attributed to the COVID-19 pandemic. We are estimating 2020 work requests will remain consistent with where we ended 2019 due to high demand on resources during the Fall construction season.*** We are projecting a 5% increase for 2021. This projection is based on the strong construction and development trends and additional workload related to the new County monument permit ordinance (Ord. No.1874).



***The Fall months typically realize large increases in workload due to the construction industry push to complete projects prior to winter.



BUDGETING

Update on 2020 Budget

- ▶ June budget adjustment resulted in reductions to the General Fund and Tax Fund Operating budgets of 18.7% and 18.2%, respectively.
- ▶ No foreseeable 2020 budget adjustments that will impact the general or tax fund.



BUDGETING

2021 Projected Budgeting Consideration

- ▶ Proposed Budget Requests include:
 - ▶ Reinstate majority of operating base budget prior to June 2020 cuts, including:
 - ▶ Increased vehicle replacement
 - ▶ Increased Midvale building rental
 - ▶ Vehicle rental due to social distancing
 - ▶ Plotter for mapping and recordation
 - ▶ Other miscellaneous items
 - ▶ 3 Standing desk and 3 chairs for employees
 - ▶ 5 UAS batteries for drone flights
 - ▶ 2 large monitors for Boundary Survey Program Managers
 - ▶ Total request amount \$72K, \$62K of which will be self-funded through increased revenue



2020 PROJECTS OF INTEREST

- Sidewalk Collector App
- Verify valid address for voter ballots
- Noxious Weed Collector App
- Drone Landfill project
- UFA transition to Survey123
- COVID testing sites web
- Homeless Interactive map
- FCOZ maps
- Map requests for streets and historical data
- Census Project
- Recorder Subdivision Plat Checking Collaboration
- Final Local Entity Plat
- Welby Pit
- Surplus Canal Property Collection and Staking
- Jordan River Canal and Portages
- Aerial project
- Daybreak South Station Library
- Granite High School Library
- Re-observations of existing monuments due to earthquake
- 52 development projects resulting in 221 new monuments added to the PLSS
- Harmony Park boundary line adjustment
- New Monument Permit Ordinance (Ord. No. 1874)

2020-2022 CHALLENGES

Maintenance on Public Land Survey System (PLSS)

There are 21,000 existing PLSS monuments that we currently maintain. Approximately, 4,000 of which are on a 5 year rotation for maintenance. The remaining 17,000 are on a 7 year rotation. Maintenance of the system has fallen behind due to difficulties related to retention, recruitment, and the competitive job market.

With fully staffed survey crews, these numbers reflect it will take us approximately 7 years to bring our PLSS maintenance back on schedule.

In keeping with the plan as reflected above, the 2020 goal was to perform maintenance on 4,000 PLSS corners. The COVID-19 pandemic and the earthquake have had significant negative impact in achieving this goal. Our plan is to put forth aggressive efforts towards this goal during the colder months as construction slows down.

The County Surveyor's Office has 11 field crew FTEs to perform all field survey work for Salt Lake County projects, in addition to tracking construction, maintaining and protecting the PLSS on UDOT projects and 23 municipalities.

2020-2022 CHALLENGES

Implementation and Effects of S.B. 104 and County Ord. No.1874

This bill imposes certain requirements on any work that would disturb established survey monuments.

As permitted by S.B. 104, the County passed Ordinance Number 1874 that applies across all jurisdictions.

Requires a permit to disturb monuments

- ▶ Increases the fees for permits
- ▶ Requires monuments to be shown on all construction plans
- ▶ Allows the County to establish certain civil penalties for violations
- ▶ Prohibits performing certain construction work within 30 feet of an established survey monument without a permit

This ordinance significantly increases the demand for County Surveyor field operations. S.B. 104 and County Ordinance Number 1874 are meaningfully beneficial to property rights and the County tax system.

2020-2022 CHALLENGES

NGS/USGS Project 2022 Datum Update

The Federal Government is implementing a complete replacement of the existing horizontal and vertical datums known as NAD 83 and NAVD 88 with the North American-Pacific Geopotential Datum of 2022 (NAPGD2022). This replacement has been deemed necessary by the Federal Government to adjust and account for unchecked physical movement in the Earth's surface, geoid undulations, and gravitational anomalies in conjunction with Global Positioning Systems (GPS).

- ▶ All federal civilian agencies are required to update to NAPGD2022.
- ▶ The State of Utah is planning to follow suit in updating to NAPGD2022.
- ▶ There will be legislative action to update the definition of the Utah Coordinate System (UC 57-10-6) to conform with NAPGD2022.
- ▶ As a result, the County will be required to migrate to the new system.
- ▶ Effects on mapping, property boundaries, and the PLSS are significant.

*****This is an unfunded Federal mandate which places additional burden on County Surveyor's field and office operations.**



WHAT IS INVOLVED WITH MIGRATING TO NAPGD2022 ?

Adjustments have to be made to the existing coordinates of the PLSS

- ▶ The adjustments are not uniform and vary from zone to zone and sometimes point to point.
- ▶ These adjustments will be labor intensive.
- ▶ Will likely require additional field observation.
- ▶ Coordination with state and federal government is necessary.

WE HAVE TO GET IT RIGHT!



