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How's Turnout? - Visualizing Daily Ballot Returns Denver Elections Division, CO

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Executive Summary

“How’s turnout?” That’s the number one question we receive from candidates and reporters in the weeks before an election. The Denver Elections Division wanted to find an easier and simpler way to provide the answer. Using Tableau Data Visualization Software, we implemented an interactive dashboard on our website beginning in 2018 to easily allow campaigns, candidates and all interested parties to view a wide variety of data about voter participation and ballot returns. This Current Returns dashboard provides an at-a-glance look at turnout, featuring maps, graphs, charts and tables, that detail voter registration and ballot return information throughout the current election cycle. The dashboard has made election information more transparent and easier to understand, and addresses the needs of the media and campaigns who are most interested in data about voter registration and participation.

Interactive Data Visualization

We previously posted data about ballot returns and voter registration as a single spreadsheet. The spreadsheet contained daily numbers of voter registration and ballots returned by the various methods available, including by mail, at 24-hour drop boxes, and at our voter service and polling centers (VSPCs). Although the spreadsheet provided much of the same data found in the dashboard, the static presentation did not offer much flexibility or customization for interested parties looking for specific information.

Tableau Data Visualization software enables us to connect multiple data sources to generate highly detailed and interactive dashboards. These dashboards enable us to present the available data in a more effective way, with the ability to better describe what the information really means. Instead of a single spreadsheet filled with numbers, we can dedicate separate tabs to each type of data set the viewers want to see, telling a more complete story.

Our Current Returns dashboard consists of separate tabs that present different sets of data in multiple formats. Each of the tabs enables viewers to customize the data, whether by district, precinct, political party, or voter status.

The Ballot Returns Data tab is the first and most informative page, showing current turnout, ballots received by day, and an interactive map showing turnout by precinct. This tab also includes multiple filters that allow viewers to select ballot return data based on party affiliation and if so desired, by political boundaries within the City and County of Denver (House, Senate, City Council, DPS, and RTD Districts). Beyond the improvement of being able to visualize the data in a more meaningful way, having this information displayed on a precinct level map, rather than just as city-wide totals, has been a huge upgrade and is very popular with our viewers.

The next tab, Registration Data – Current, is very similar to the previous tab, showing all registered voters on a precinct-level map, bar and pie charts, and tabular data. Filters include the ability to show data by Registration Status (Active/Inactive) and by Party Affiliation. Campaigns are always interested in knowing where their constituents are located geographically, so again, the map is very popular.

The next tab provides daily registration numbers in a graphical form. The chart also documents the change in registration each day and by party.

The next several tabs present ballot returns broken down by return method, including the numbers at each of our 24-hour drop boxes and at our VSPCs. There is also a tab that provides detailed information about the number of mail ballots issued, returned, accepted and rejected. Each of these dashboard tabs

present the data in both graphical and tabular form. And each tab can be downloaded as a picture, PDF, or even a PowerPoint.

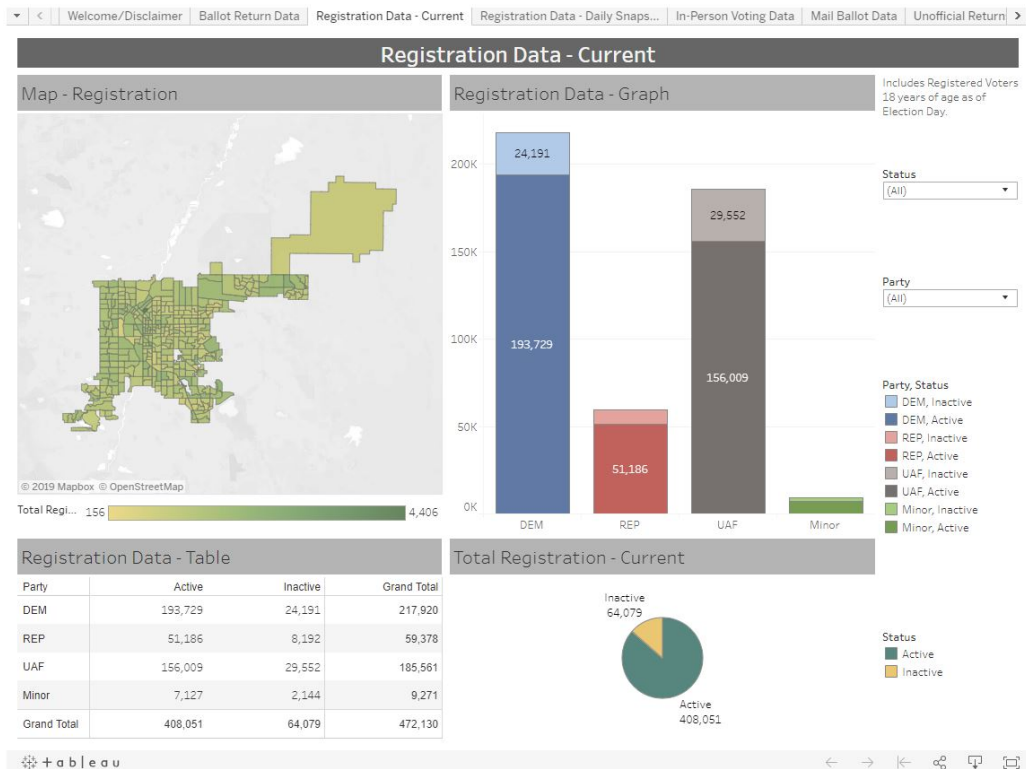
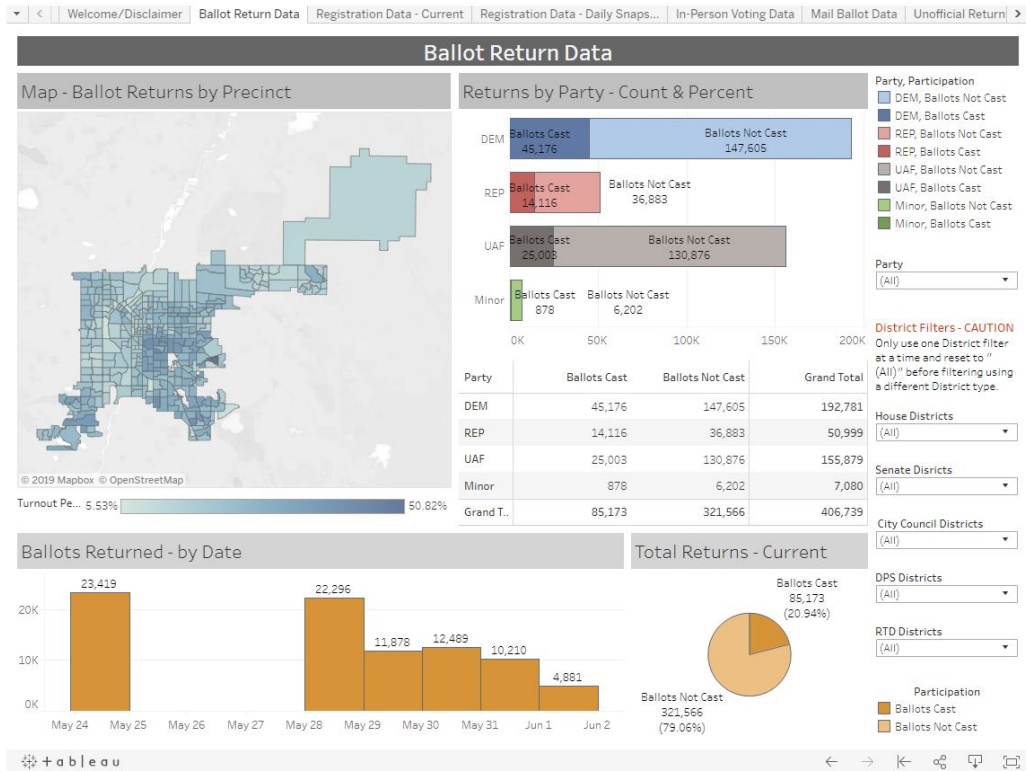
Results

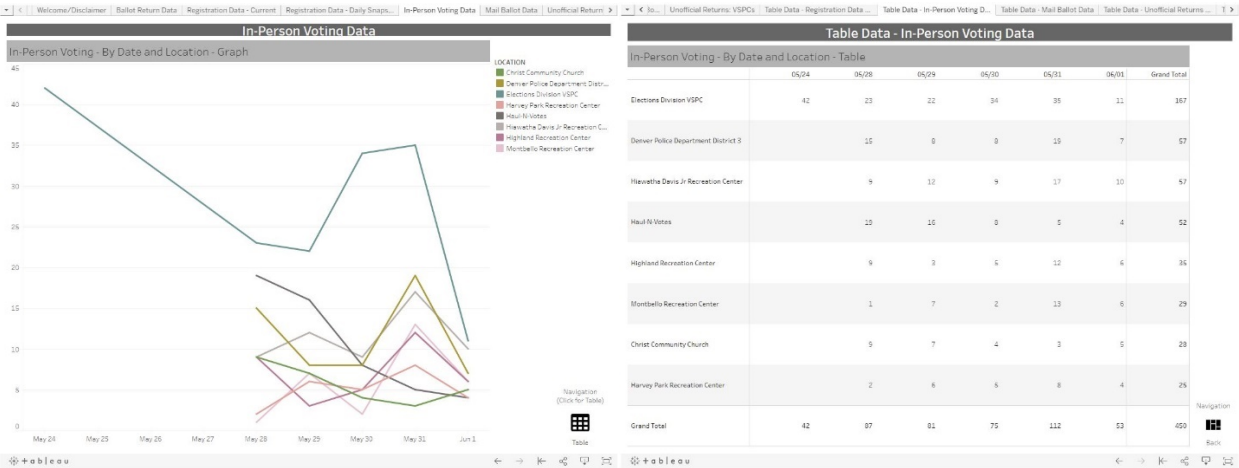
Tableau Data Visualization Software was a great tool to create and publish this multi-tab dashboard. The ability to connect to multiple data sources allowed us to recreate and improve upon the original spreadsheet, giving viewers a more detailed breakdown of the numbers, and with the ability to customize how they filter and view the existing data. Tableau has also added features to help create these dashboards and have them be (relatively) responsive to viewing on different devices, which is a critical feature in the existing world of desktop, laptop, tablet and smartphone users. We implemented and published our first Current Returns dashboard for the June 26, 2018 Primary Election, where it received 4,572 views. Just two elections later, in the May 7, 2019 Municipal Election, the views have increased by roughly 294%, to 18,001 views.

Continuous Improvement

We always try to be responsive to viewer input and strive to improve our processes and products. With every Tableau update, we search to see if any new features have been developed that may increase the effectiveness of our dashboards. As we continue to receive feedback, we review these comments to see if we can implement any new features to create a more effective dashboard experience.

Attachment 1: Interactive Current Returns Dashboard Tabs





Attachment 2: Static Spreadsheet Data Example

[illegible]