

# Downloading and preparing survey data using the Qualtrics API in the Stata ecosystem

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# Motivation

- Preparing survey data for analysis is tedious and error-prone.
- Manually downloading data files takes time and adds a step before workflows.
- Variable labels can be easily obtained from a .csv download, but value labels can not.
- Automated download and preparation opens up other possibilities.

## qualtrics.ado

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- Qualtrics maintains an API with fairly extensive capabilities.
- Can download survey data and meta-data.
- Requires API token and data center.

- -qualtrics- command uses a subset of these to list, download, and clean data.
- Shell out of Stata to use cURL.
- -qualtrics set- stores Qualtrics token and data center needed for API calls.
- -qualtrics list- list surveys and allows filtering.
- -qualtrics get- Downloads surveys, optionally converts and cleans them.

-qualtrics set-

## -qualtrics set-

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- Qualtrics tokens are long and annoying to copy into a command.
- Someone with your token and ill-will could delete everything.
- -qualtrics set- helps with both.
- **Required options:**
  - token: Your Qualtrics API Token.
  - center: Your Qualtrics data center (not sensitive).
  - password: A password you make up.
  - user: Differentiates users who share .ado folders.

## -qualtrics set-

- Takes token and encrypts it.
- Stores with data center information in text file.
- Password is key to decrypting (with .txt file).
- Re-set any time (using the token again).

```
. qualtrics set, t("YourQualtricsAPITokenWouldGoHereToSet") c("co1") u(danial) p(EarthQuake)
```

```
Data center information and encrypted token saved to c:\ado\personal\danialqualtricscreds.txt  
You can now run qualtrics using your password only rather than specifying the token and data center
```

## -qualtrics list-

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- Lists surveys associated with your account
- **Required** options:
  - match: Survey names matching regular expression.
  - active: Only in/active surveys.
  - modrange: Surveys last modified in date range.
  - createrange: Surveys created in date range.
  - password or token and center.



## -qualtrics list-

- Lists information about each survey.
- surveyid required to get surveys.

```
. qualtrics list, m("Region 10") creator(01/01/2020:May 5 2020) u(danial) p(EarthQuake)
```

Found 164 surveys total  
4 met the criteria specified

name	surveyid	lastModified	creationDate	isActive
Region 10 2020 Parent Involvement Survey	SV_e4B8Xe02yZzxM54d	2020-06-08T14:33:24Z	2020-01-14T23:13:37Z	false
Region 10 Gibson Support	SV_0PP5B08CPuDX8xL	2020-04-10T16:56:20Z	2020-04-07T02:18:27Z	true
2020 Region 10 Registration Page	SV_0004v8D9junojTn	2020-02-26T14:59:01Z	2020-01-22T18:25:32Z	true
Region 10 2020 Parent Involvement Request Student List	SV_98pxTkiZ2strFjL	2020-02-05T01:16:23Z	2020-01-22T18:26:25Z	true

- Information is also stored in rreturn.

## -qualtrics get-

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- Downloads designated survey with cleaning options
- **Required** options:
  - id: Survey ID.
  - csv: Location (not name) to save .csv.
  - dta: Name and location to save .dta file.
  - valuelabels: Request response value labels rather than values.
  - clean: Apply variable and value labels, store information in charactersitics.
  - relab: Display commands to modify variable labels.
  - revallab: Display commands to modify value labels.
  - preserve: Restore current dataset.
  - password or token and center.

## An Example

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- In addition to saving time and reducing cleaning errors, -qualtrics- opens up other possibilities.
- Response rates portals or dashboards.
- Automated reports run daily.

- Yearly surveys with sample of districts, most who are not included each year.
- Coordinate with district staff and region staff in which districts are nested.
- Provides registration to update contact information.
  - ...and let us know who is active in the process.
- Provides information and response rates so districts and regions can follow up.

# Manage Contacts

The screenshot shows a web interface for managing contacts. On the left is a dark sidebar with a close button (X) and several navigation links: 'Support for contacting parents', 'Survey administration resources', 'Who has responded at Region 10?', 'How does our response rate compare to the rest of Texas?', 'FAQ', 'Survey administration timeline', 'Registration', 'Have questions? Contact us!', and 'About this dashboard'. The main content area is titled '2020 Texas Parent Involvement Survey: Region 10'. Below the title is an 'Announcements' box with a blue header and a bullet point: 'The survey is now live, please contact parents with the survey information and remind them again in early May. Thank you for your help and stay healthy!'. Below the announcement is a paragraph of text: 'Thank you for visiting the registration page, [redacted]. Please confirm the information for Region 10 in the form below. Afterwards, please explore your web portal by clicking on the menu in the top left corner. Your web portal contains an FAQ, survey administration resources, and a form to request a digital version (.xlsx) of the list of students selected for the survey in your district. Once surveys are distributed, you will also be able to track current response rates in Region 10 using your web portal. The more parents we hear from, the more accurately the results will reflect the opinions of parents of students receiving special education services in your district!'. Below this text is a form titled 'Please confirm the following information for Region 10:'. The form contains three fields: 'Contact Person: [redacted]', 'Email: [redacted]', and 'Phone [redacted]'. Below the fields are two radio button options: 'Yes, this is the correct contact information' and 'No, this is not the correct contact information'. At the bottom right of the form is a red 'Next' button.

- Contacts can update contact information.
- Workflow updates contact information and response rates for communications.

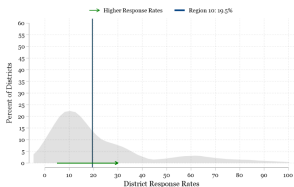
# See Response Rates

As of [11 June 2020], the response rate for Region 10 is:

19.5%

The response rate Statewide is:

17.3%



- Response rates updated nightly and uploaded.

# Find Non-Response

As of [11 June 2020], the Region 10 response rate is:

19.5%

Use [search] box below or click column headers to sort the table  
(hold shift and click to multi-column sort). ↓

Show [25] entries

Search:

District Number	District	Current Response Rate
		84.5%
		80.0%
		66.7%
		54.5%
		31.6%
		30.7%
		28.6%
		28.6%
		21.2%
		20.8%
		18.8%

- Contacts can see areas of low response and follow-up.

# Thanks!

- Questions later?
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  - [daniel.hoepfner@gmail.com](mailto:daniel.hoepfner@gmail.com)
  - Code: <http://www.danielhoepfner.com/qualtrics.ado>
  - Help: <http://www.danielhoepfner.com/qualtrics.sthlp>