

# Research Tips, Finding & Using Data



AKA, How do we do what we do?

# Research Tips, Finding & Using Data

- **Why it matters**
- **Spreadsheet basics**
- **Data storytelling**
- **Reading legislation**
- **Advanced googling**
- **Where's the data?**

## Why It Matters

“OK Policy believes that Oklahoma can be a great state, one that ensures prosperity for all our citizens through good schools, good jobs, good health and strong communities. To make the best policy decisions that lead us to this better future, policymakers and citizens need good, factual information. We provide the facts and advocate for fair and responsible public policies.”

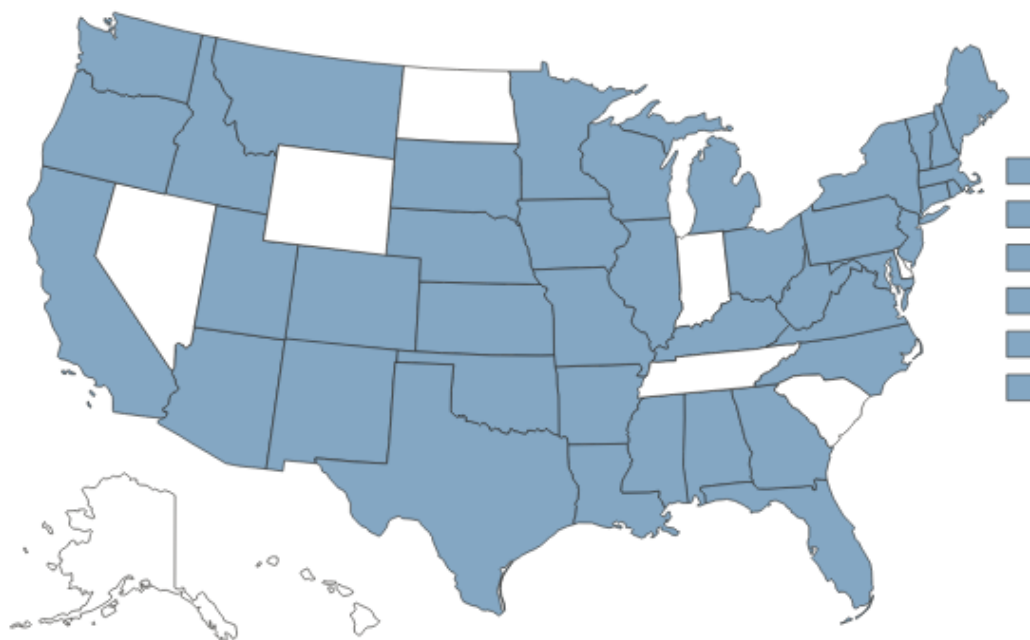
## Why It Matters

“The ideas of economists and political philosophers, both when they are right and when they are wrong, are more powerful than is commonly understood. Indeed, the world is ruled by little else. Practical men, who believe themselves to be quite exempt from any intellectual influences, are usually slaves of some defunct economist.”

— John Maynard Keynes

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Click on the map to visit the State Priorities partners' websites.



### Tweets from State Priorities Partners



**OK Policy**

@OKPolicy

26s

Happy Birthday, Medicare and Medicaid!  
These programs improve the health & financial security of 1 in 3 Americans.  
[bit.ly/1gq6ncl](http://bit.ly/1gq6ncl)



**Jared Bernstein**

@econjared

2m

Instead of asking if [#Medicare](#) & [#Medicaid](#) are sustainable, we should be asking what we need to do to sustain them: [nyti.ms/1DSeGmt](http://nyti.ms/1DSeGmt)

↻ Retweeted by Center on Budget

Expand



**Shannon Spillane**

@ShannonCBPP

2m

[#Medicaidat50](#) key fact: Medicaid provides significant financial support to low-income beneficiaries [bit.ly/1lspfh9](http://bit.ly/1lspfh9)



**MN Budget Project**

@MNBudgetProject

6m

Children who get h/care through Medicaid are more likely to succeed in school  
[#medicaidat50](#) [bit.ly/1H6q2mU](http://bit.ly/1H6q2mU)

# Hello, spreadsheet.



# Spreadsheet Basics

- Rows, Columns, and Cells

	A	B	C	D	E
1					
2					
3					
4					
5					
6					
7					
8					

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- Rows, Columns, and Cells
- Ideally, each row describes one “thing”



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## A Survey Result

SURVYEAR	School Name	City	PERCENT WHITE	PERCENT BLACK	PERCENT HISPANIC	PERCENT AMERICAN INDIAN
2013	8TH AND 9TH GRADE CTR	ELK CITY	66.7%	4.5%	18.9%	6.2%
2013	ACADEMY CENTRALES	TULSA	3.9%	80.9%	3.4%	2.5%
2013	ACADEMY ES	GUYMON	21.1%	1.9%	73.9%	0.2%
2013	ACHILLE ES	ACHILLE	70.7%	0.5%	2.4%	23.9%
2013	ACHILLE HS	ACHILLE	64.9%	4.1%	2.1%	26.8%

# Spreadsheet Basics

- Rows, Columns, and Cells
- Ideally, each row describes one “thing”

## A Date

Date	Total Population	DOC Facility	Private Prison	County Jail Contract
4/30/2013	26363	17922	5335	634
3/30/2013	26242	17982	5113	635
2/28/2013	26272	17967	5105	638
1/31/2013	26352	18031	5128	642

# Spreadsheet Basics

- Rows, Columns, and Cells
- Ideally, each row describes one “thing”

## A Tax

Tax	FY '11	FY '12	FY '13	FY '14	FY '15	FY '16
Gross Income Tax	3496.29	3855.84	4123.86	4133.95	4403.75	4123.76
Gross Production	978.17	896.69	715.07	860.11	698.02	366.59
Sales Tax	3714.43	4038.86	4205.25	4348.68	4464.94	4287.07
Motor Vehicle	638.26	690.41	676.12	786.45	766.24	758.84

# Spreadsheet Basics

- Rows, Columns, and Cells
- Ideally, each row describes one “thing”

**Headers: Use them.**

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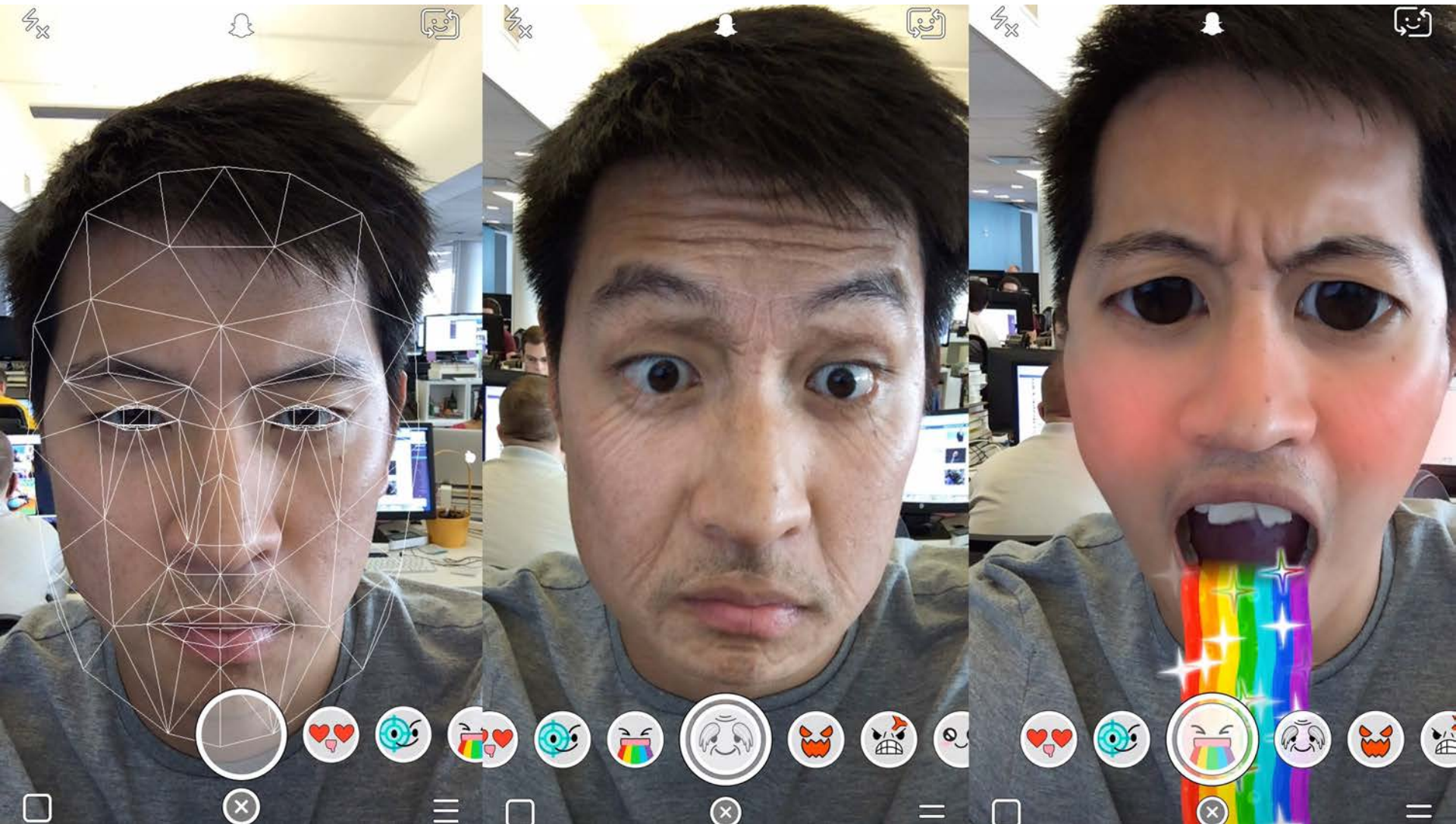
- The goal is to put some things in some order.
- Sort order: blanks, spaces, numbers, letters
  - If sort result looks wrong, you may have leading spaces

# Spreadsheet Basics: Sorting

- The goal is to put some things in some order.
- Sort order: blanks, spaces, numbers, letters
  - If sort result looks wrong, you may have leading spaces
- Preserve original order with an ID column  
(1,2,3,4,5,6...)



# Spreadsheet Basics: Filtering



# Spreadsheet Basics: Filtering

- The goal is to find things.

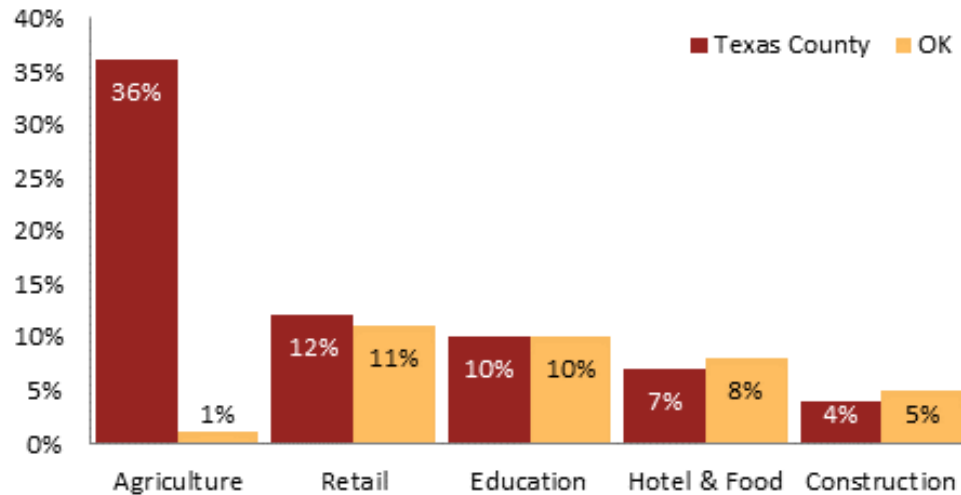
# Spreadsheet Basics: Filtering

- The goal is to find things.
- How you do that is up to you:
  - Exact matches
  - Fuzzy matches
  - Ranges for numbers/dates

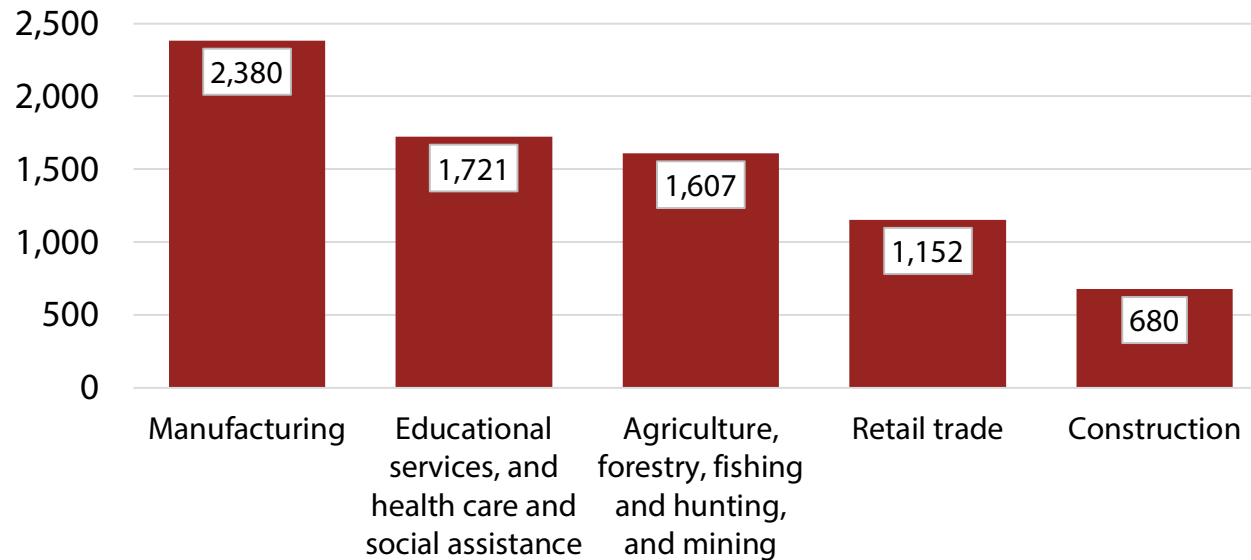
# Data is made by humans.



# Top 5 Employment Sectors in Texas County



Source: U.S. Census Longitudinal Employer-Household Dynamics survey, 2013



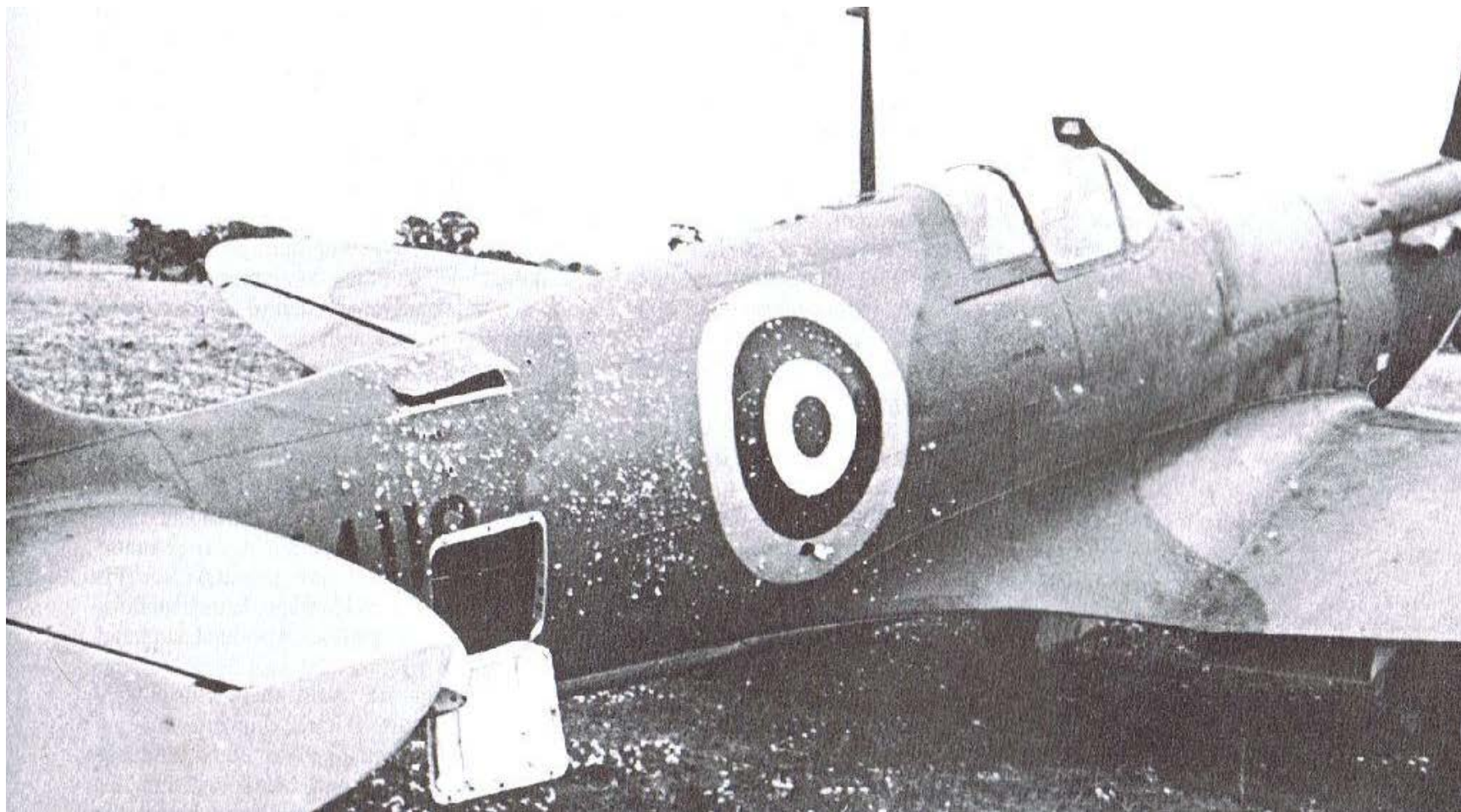
Source: U.S. Census American Community Survey, 2009-2013 5-year estimates



# Data is part of a story.



Example from “How Not To Be Wrong:  
The Power of Mathematical Thinking”  
by Jordan Ellenberg



# Bullet holes per square foot

Engine	1.11
Fuselage	1.73
Fuel system	1.55
Rest of plane	1.8



The same data tells more than one story.

**Winner Of The  
Grand Prize 1951  
Venice Film Festival**

**"BEST  
foreign film  
of year"  
"Best directed  
film of year"**  
—Natl B'd of Review

**Rasho-Mon**

**"A  
rare  
piece  
of  
film art"**  
— N.Y. TIMES

The great and exciting Japanese  
production which brings a new  
experience in the cinema.

...introducing the beautiful  
**MACHIKO KYO  
TOSHIRO MIFUNE  
MASAYUKI MORI**

**ACCLAIMED THE BEST PICTURE OF THE YEAR FROM ANY COUNTRY**

Copyright 1951 RKO Radio Pictures Inc. Country of Origin U. S. A.

Distributed by  
RKO Radio Pictures, Inc.

Property of Paramount Pictures Corp. Screenplay by Akira Kurosawa and  
the authors of the picture of same name. Best picture award—Academy Awards.

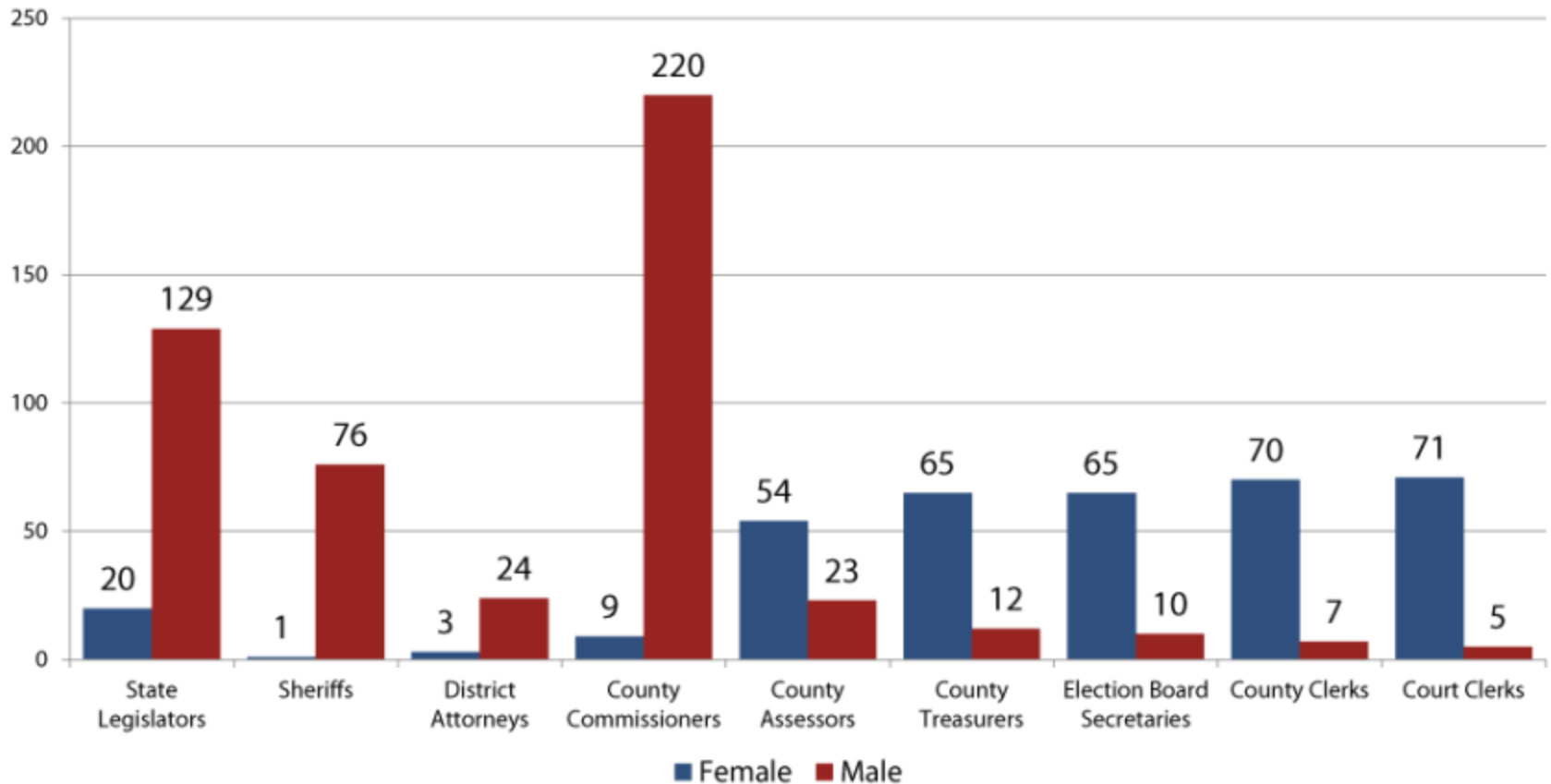
52 127

A vintage movie poster for the film 'Rashomon'. The poster features a large, stylized title 'Rasho-Mon' in white on a black background. Above the title, it says 'Winner Of The Grand Prize 1951 Venice Film Festival'. To the right, there are three film stills: the top one shows a man and a woman in a close embrace, the middle one shows a man and a woman in a dramatic pose, and the bottom one shows a man and a woman in a close embrace. Text on the poster includes 'BEST foreign film of year', 'Best directed film of year', 'A rare piece of film art', and 'ACCLAIMED THE BEST PICTURE OF THE YEAR FROM ANY COUNTRY'. The names of the lead actors, Machiko Kyo, Toshiro Mifune, and Masayuki Mori, are listed. The poster also includes a small illustration of a man in a blue frame at the bottom left and a small illustration of a man and a woman in a boat at the bottom right.

“Oklahoma, which ranks first in female  
elected representation, ranks last in  
communities of color elected  
representation.”

-Health of State Democracies Report, Center for American  
Progress Action Fund

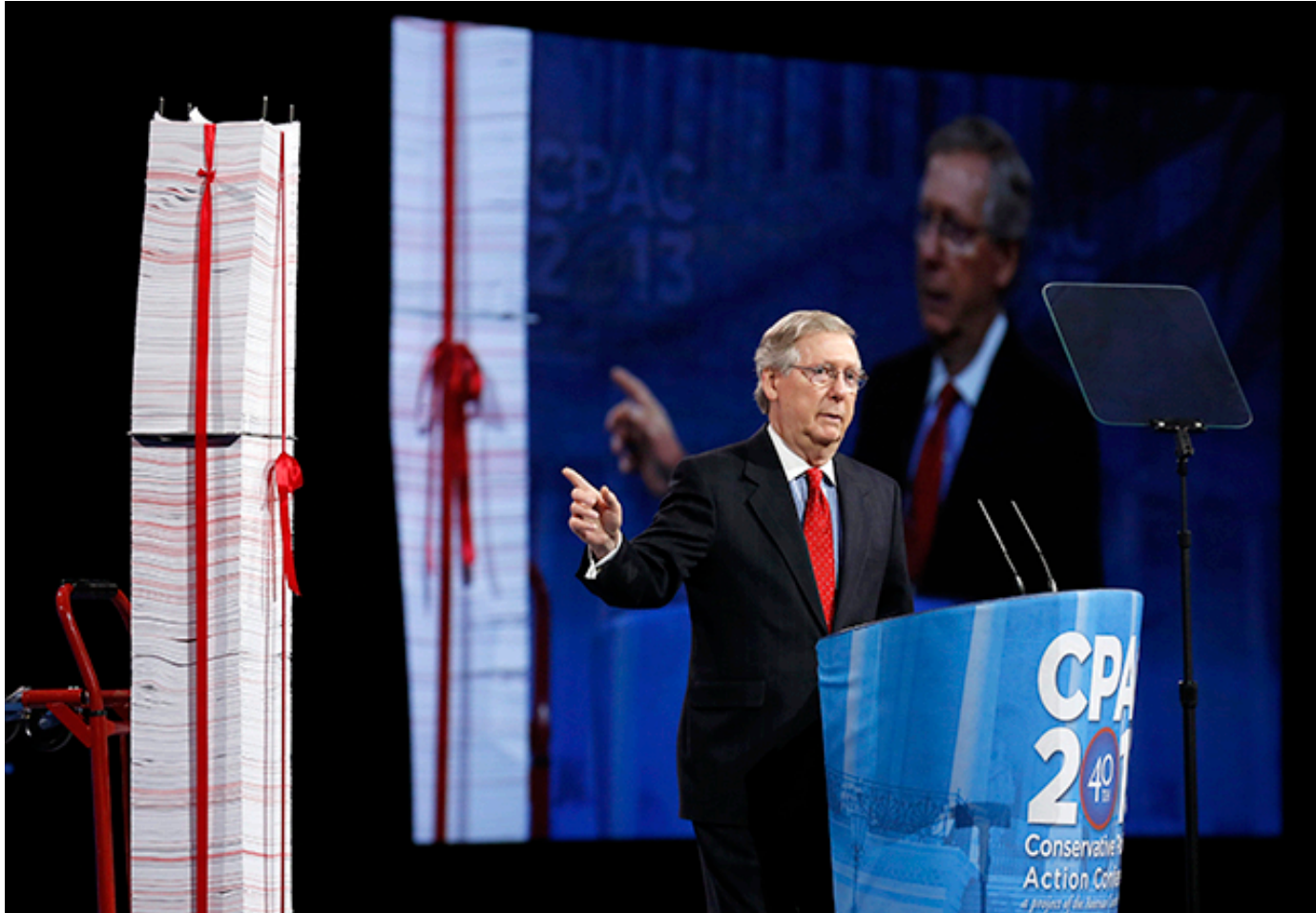
# Oklahoma State and County Officeholders, 2014 - 2015



Data Source: wholeads.us; some data was corrected by OK Policy

[www.okpolicy.org](http://www.okpolicy.org)

# Read the bills.



Enter Bill #

Search

Income tax; providing exemption for certain income earned by certain licensed teachers. Effective date.

History

Amendments

Bill Summaries

Versions

Votes

Co Authors

## History For SB 93

Action	Journal Page	Date	Chamber
First Reading	93	02/02/2015	S
Authored by Senator Mazzei	93	02/02/2015	S
Second Reading referred to Finance	245	02/03/2015	S
Reported Do Pass as amended Finance committee; CR filed	329	02/17/2015	S
Title stricken		02/17/2015	S
coauthored by Brinkley	332	02/17/2015	S
General Order, Amended	581	03/09/2015	S
Measure passed: Ayes: 45 Nays: 0	582	03/09/2015	S
Referred for engrossment	582	03/09/2015	S
coauthored by Henke (principal House author)	599	03/09/2015	S
Engrossed to House	601	03/10/2015	S
First Reading	606	03/10/2015	H
Second Reading referred to Appropriations and Budget	656	03/11/2015	H
Referred to Appropriations and Budget Revenue and Taxation Subcommittee		03/11/2015	H



# Read the Bills, Laws, Rules, Etc.

- Browse legislation by subject:  
<http://www.oklegislature.gov/SubjectIndex.aspx>
- Search legislation:  
<http://www.oklegislature.gov/AdvancedSearchForm.aspx>
- Look up current Oklahoma laws:  
<http://www.oscn.net/applications/oscn/index.asp?ftdb=STOKST&level=1>
- Look up Oklahoma agency rules: <http://okrules.elaws.us/oac>
- See key bills identified by OK Policy: <http://okpolicy.org/billtracker/>

- **Oklahoma Legislative Primer:**  
<http://okpolicy.org/resources/2015-oklahoma-legislative-primer>
- **What's That? Glossary:**  
<http://okpolicy.org/category/whats-that>

# Advanced Googling for Fun and Profit

- **Search for a specific phrase with quotes** - “wind blows sweeping down the plain”
- **Search for one thing or another** - sanction OR enforcement
- **Search for results that don’t include a specific word with the hyphen/subtraction sign** - “Chocolate cake”-butter
- **Search by site** - site:okpolicy.org “budget”
- **Find similar sites** - related:okpolicy.org
- **Search by filetype (ppt, xls, mdb, pdf, etc.)** - filetype:xls
- **Combine them!** - site:ok.gov/doc filetype:xls
- **Designate where search terms appear (in the url, title, body of the page and in links to the page)**
  - allinurl: oklahoma data
  - allintitle: oklahoma data
  - allintext: oklahoma data
  - allinanchor: oklahoma data
- **Search by image** -  
<http://www.google.com/insidesearch/features/images/searchbyimage.html>  
(But seriously, don’t type out this link. Do a Google search for “Google search by image.”)
- **Google News Archive Search** - [http://news.google.com/archivesearch/advanced\\_search](http://news.google.com/archivesearch/advanced_search)



# Where is the data?

## Oklahoma-Specific

OK Policy County-Level Data App - <http://okpolicy.org/resources/county-level-data>

Oklahoma Digital Prairie - <http://www.digitalprairie.ok.gov> (State Agency Annual Reports and other primary documents)

State of Oklahoma public data - <https://data.ok.gov/>

## Demographic

US Census Current Population Survey -

<http://www.census.gov/cps/data/cpstablecreator.html>

US Census American Fact Finder -

<http://factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml>

Census Reporter (tool created for the Knight News Challenge that is an easier way to explore and chart Census data) - <http://censusreporter.org/>

## Economic

US Bureau of Labor Statistics – <http://www.bls.gov/>

Federal Reserve Economic Data - <http://research.stlouisfed.org/fred2/>

IRS Tax Statistics - <http://www.irs.gov/uac/Tax-Stats-2>

National Association of State Budget Officers - <http://www.nasbo.org/publications-data>

# Where is the data?

## Education

National Center for Educational Statistics (NAEP scores) -

<http://nces.ed.gov/nationsreportcard/naepdata/>

Common Core of Data - <http://nces.ed.gov/ccd/>

IPEDS Data Center (higher education) -

<http://nces.ed.gov/ipeds/datacenter/Default.aspx>

## Criminal Justice

Bureau of Justice Statistics - <http://www.bjs.gov/index.cfm>

Hall of Justice (Sunlight Foundation) - <http://hallofjustice.sunlightfoundation.com/>

## Health

Henry J. Kaiser Family Foundation (State Health Facts) – <http://kff.org/statedata/>

Health Indicators Warehouse - <http://www.healthindicators.gov/>

# Where is the data?

## Think Tanks

Center on Budget and Policy Priorities - <http://www.cbpp.org/>  
State Priorities Partnership - <http://statepriorities.org/>  
Institute on Taxation and Economic Policy - <http://www.itepnet.org/>  
Economic Policy Institute – <http://www.epi.org/>  
Brookings Institute - <http://www.brookings.edu/>  
Urban Institute - <http://www.urban.org/>  
Pew Center on the States - <http://www.pewstates.org/>  
Tax Foundation - <http://taxfoundation.org/>

## Even More

Google Public Data Explorer - <http://www.google.com/publicdata/directory>  
Journalist's Resource - <http://journalistsresource.org/>  
Hechinger Report (education policy news) - <http://hechingerreport.org/>  
Marshall Project (criminal justice policy news) - <https://www.themarshallproject.org/>  
Kaiser Health News (health policy news) - <http://khn.org/>  
Governing Magazine (state and local policy news) - <http://www.governing.com/>