



STANFORD SOCIAL INNOVATION REVIEW PRESENTS

DATA ON PURPOSE

TELLING GREAT STORIES WITH DATA

February 9, 2:45 – 3:45 p.m.

Data Mining for Crafting Cohesive Narratives



Cheryl Phillips

Investigative Data Journalist;
Hearst Professional in
Residence, Graduate Program
in Journalism, Stanford
University

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Where is the story?



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Finding the Facts

- What to know
- Who to find out about
- How to distill it
- It's all about **the story**

Consider the **TYPES** of Sources

Instead of digging for a specific fact, ask yourself:
Who would have this type of information?

- Individuals *Informal sources*
- Organizations *Institutional sources*
 - Businesses
 - Governments
 - Associations
- Universities *Scholarly sources*
- News organizations *Journalistic sources*



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What to Know: Everything is Data

Type of organization: Business, Government, NFP, NGO

- **Standards:** laws, regulations, internal policies
- **Money trails:** annual financial audits and reports, internal budgets and forecasts.
- **Government records:** funding requests, financial reports, audits, inspections, licenses, complaints, SEC, OSHA, pollution, campaign finance.
- **Real estate records**
- **Consultant reports**

How to Find it: GOOGLE HACKS

- *“full name or phrase”*
- *rphonebook: john doe, ca*
- *site:gov* **or** *site:fhcrc.org*
- *link:www.whatever.com*
- *filetype:pdf* **or** *doc* **or** *PP* etc.



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Dive Deeper

Search engines typically miss:

- Database information
- Content behind firewalls
- Content behind registration screens
- Dynamically generated pages



How to find it

- [Federal Audits](#)
- [GAO reports](#)
- [Guidestar](#)
- [National Center for Charitable Statistics](#)
- [Reporter's Desktop](#)
- [The Internet Archive](#)
- www.searchsystems.net
- www.rtknet.org

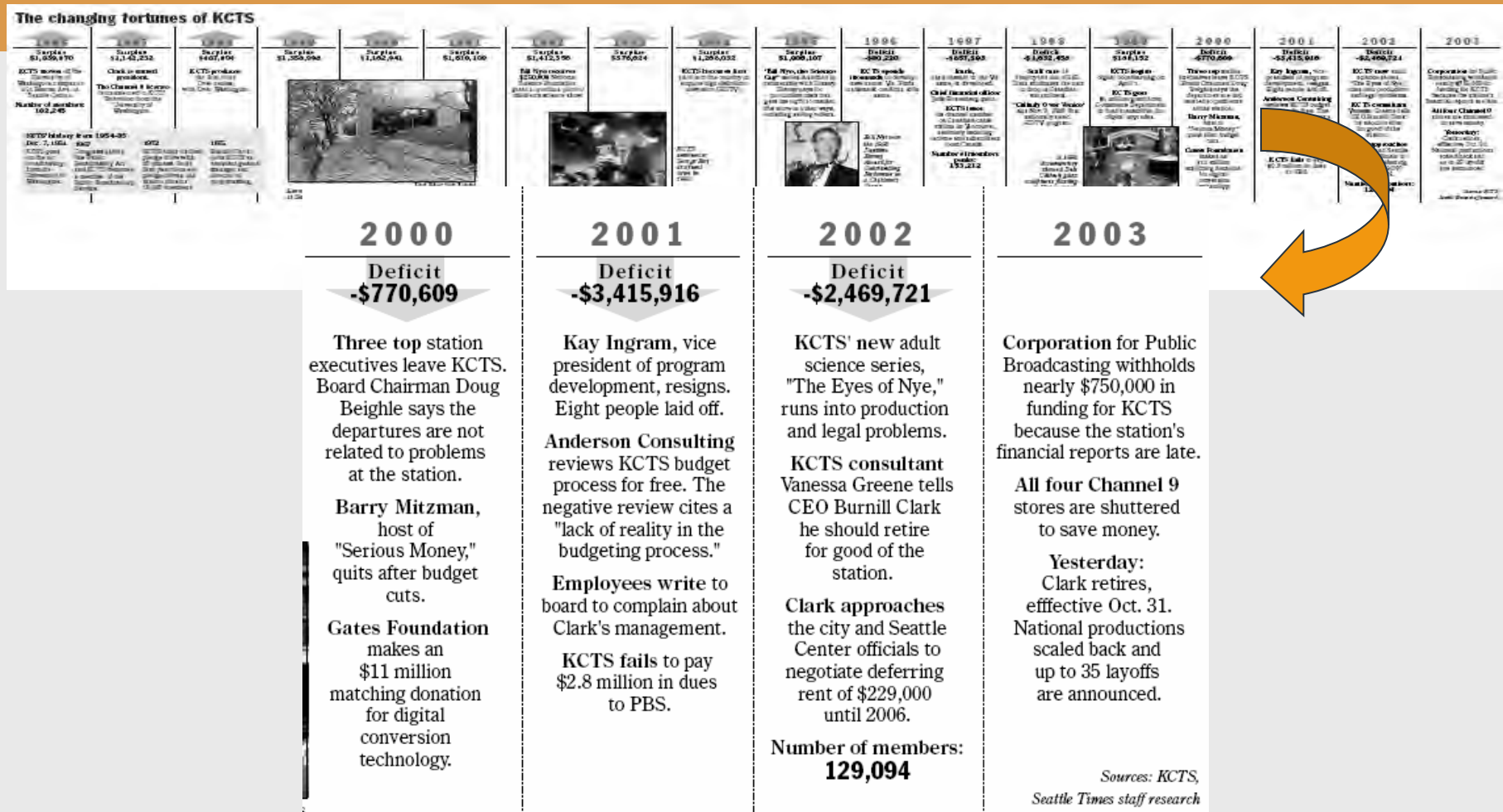
How to find it

- [Research Buzz](#)
- [Wolfram Alpha](#)
- [Factfinder](#)

Once You Have the Data: How to Distill it

- Chronology
- Experts
- Analysis
- Start with a spreadsheet if you can

Timelines Come From Spreadsheets



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Using the Right Tools: PDFs

For data in PDFs, use Tabula or CometDocs

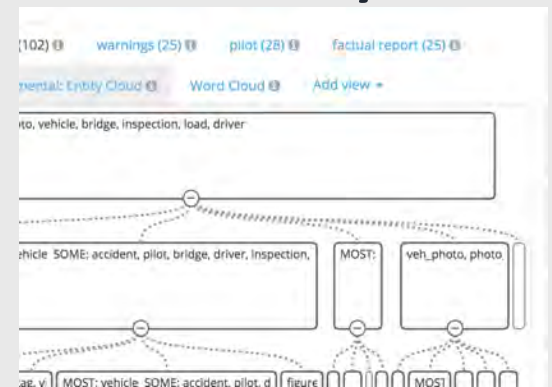
Tabula



Tabula is a tool for liberating data tables locked inside PDF files.

cometdocs
Online Document Management System

For text in PDFs, try
Overview



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All data is dirty data

QuickTime Player File Edit View Window Help

127.0.0.1:8080/pdf/416ee4ebc6714de3b7be9a0ac958fdbbae28520c

Apps Bookmarks NICAR 2015 Slides Patrick Garvin: Blog Convextra Plugin rooms / shared Other Bookmarks

Tabula is experimental software Home About

Check here ☐ if continued on attached sheet.

Download All Data

Clear All Selections

☐ Preview Data Automatically? [Help](#)

COMPANY, ASSOC., GOVERNMENT AGENCY CONTINUED F-1

Name: CARYLCO, BRIDGE B Page:

3 ASSETS - INVESTMENTS - INTEREST - DIVIDENDS

Name and address of each company, association, government agency	Type of Account or Description of Asset	Asset Value (Line Code)	Income Amount (Line Code)
US Bank TP Business 804 & 77 Columbus	US Bank TP (1000)	0	0
Johnson & Johnson P.O. Box 726 Lansdale	Share	0	0
Raytheon 2700 Wilson Street Bedford	Share	0	0
Abbott Laboratories 100 Abbott Park Rd Abbott Park	Share	0	0
Mobile Energy Inc (MELI)	Share	0	0
All First & Overlake INC (APO)	Share	0	0
Shawco Carylco SEP IRA	IRA	0	0
Revised & Ready JT TIR	JT TIR	0	0

tabula-416ee4ebc671...csv AngelJan2013.pdf methadone clip.mp4 Oso.mp4 Show All

Using the Right Tools: Downloading & Scrapping Data

- Dataminer
(Chrome)
- import.io (app)
- Downthemall
(Firefox)



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Using the Right Tools: Cleaning & Standardizing Data

OpenRefine



OpenRefine interface showing data cleaning and standardization results.

Top controls: Show as: **rows** records | Show: 5 10 25 50 rows | « first < previous 1 - 10 next > last »

Left sidebar: Filtered by Hospital (3 items).

#	customerId	customerId2	phoneNumber
1.	ATLANTICARE REGIONAL MEDICAL CENTER; 1925 Pacific Ave; Atlantic City; NJ; 08401	Atlanticare Regional Medical Center	1925 Ave
2.	Atlanticare Regional Medical Center; 1401 Atlantic Avenue; Atlantic City; NJ; 08401	Atlanticare Regional Medical Center	1401 Avenue
3.	ATLANTICARE REGIONAL MEDICAL CENTER-MAINLAND; 2500 English Creek Avenue; Galloway Twp; NJ; 08401	Atlanticare Regional Medical Center-mainland	2500 Creek

Right sidebar: Facets for each column.

- customerId**: 1 - 2.2k (Facet: 1)
- customerId2**: 1 Category (Facet: 1)
- phoneNumber**: 2,182 Categories (Facet: (209)162-8738, (435)788-5184, (862)527-8905, (929)876-5585, (386)916-5431, (805)346-5367ext:22, (608)370-3824, (503)606-8914, (910)355-8580)



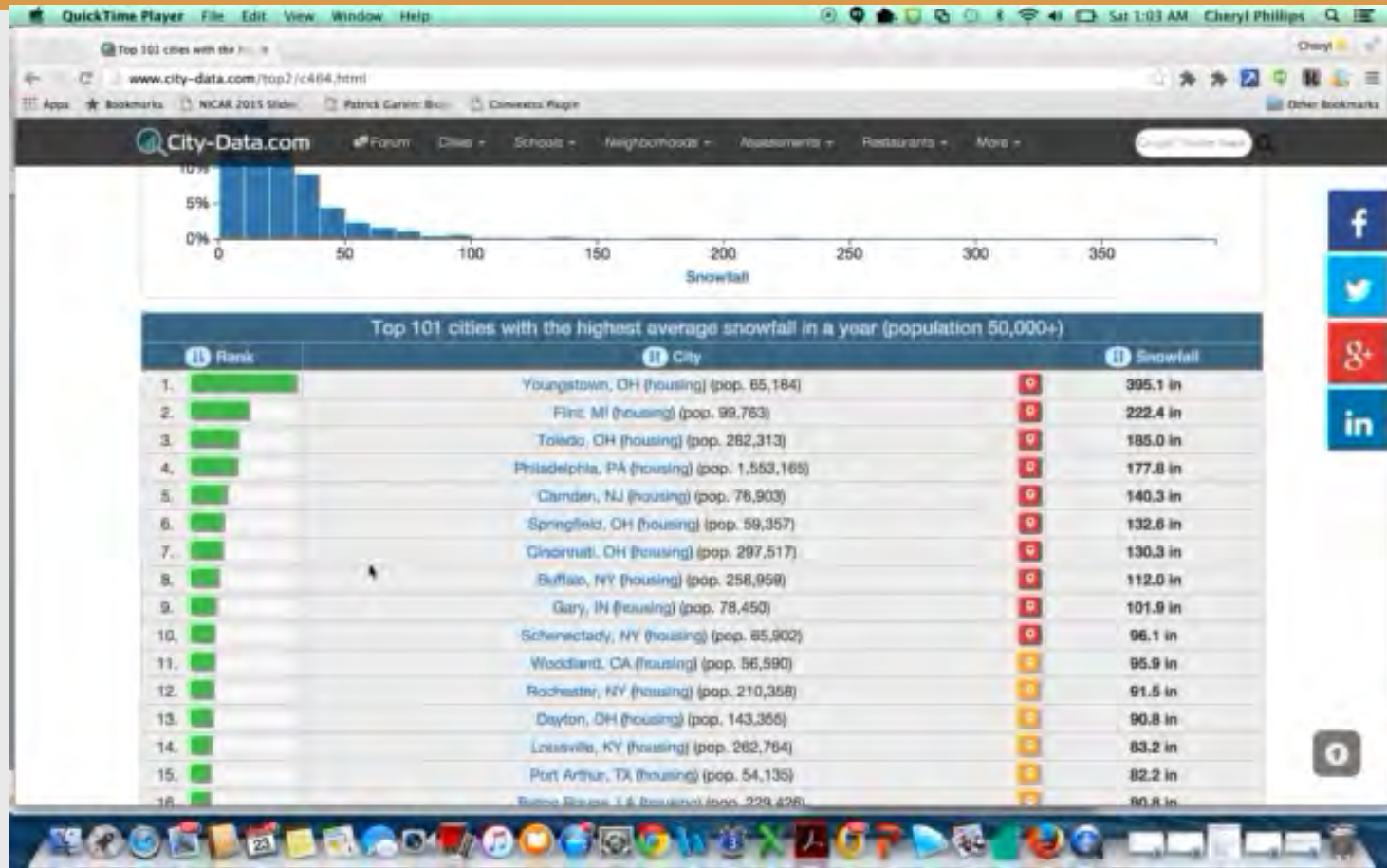
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Getting Structured Data Can be Easy



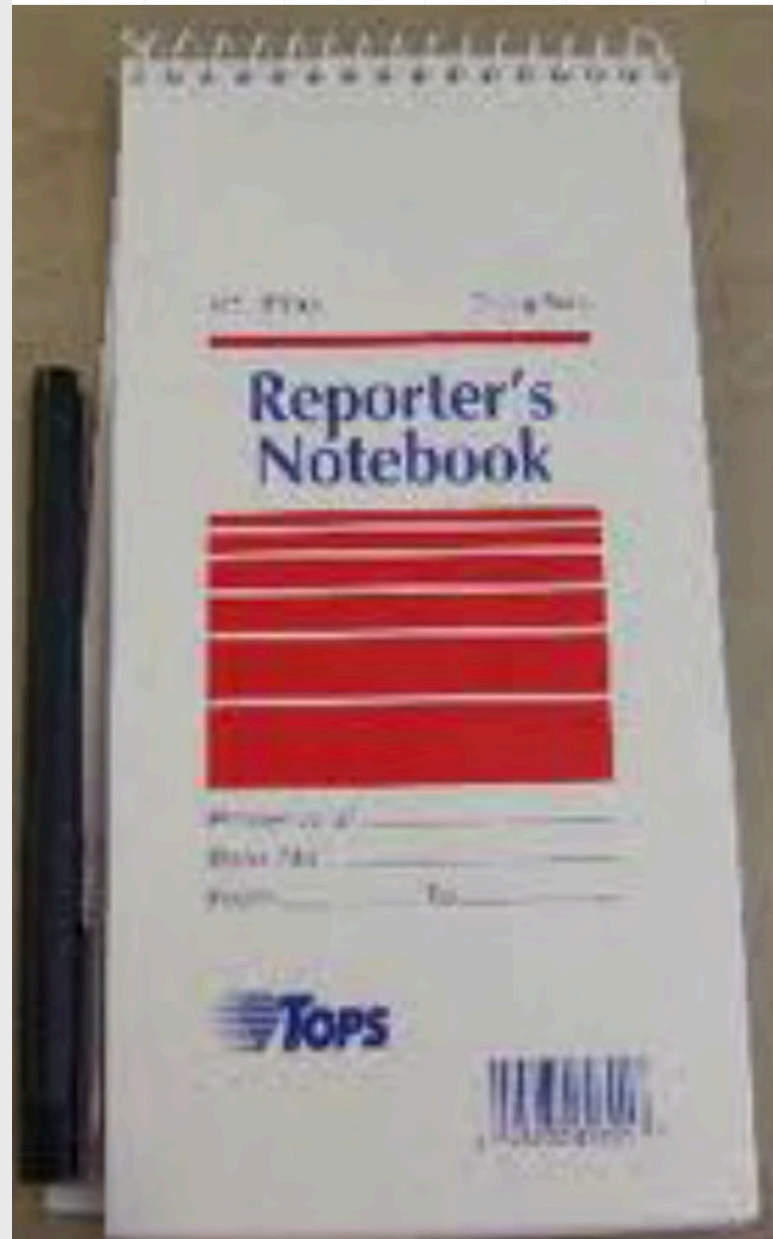
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Avoid Notebook Dump



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26% of Fullerton city workers crack \$100K club

October 12th, 2011, 9:23 pm • View 1 comment

• posted by Teri Sforza, Register staff writer

Like

+1 0

Tweet

Share



Twenty six percent of Fullerton city workers earned more than \$100,000 in total compensation in 2009 — and seven earned more than \$200,000, according to figures from the state controller's office.

Average total compensation for all 1,013 reported positions — including part-timers — was \$64,563. Of those, 262 made more than \$100K.

If we pull out just full time workers — which we're defining as those with pension benefits — there were 738 employees. Of those, 35.4 percent earned more than \$100K, and the average comp was \$85,942.

This makes Fullerton one of the most modest-paying older cities we've examined thus far. Grande dames such as Orange, Anaheim and Santa Ana had many more highly-paid city workers, and considerably higher average compensations. (The word "bankruptcy," in fact, has been whispered in Santa Ana city hall.)

The upper echelon of city employees is dominated by folks in the fire and police departments, while the lower echelons are dominated by parks and recreation, maintenance and library workers.

Fullerton spokeswoman Sylvia Palmer asked us to note that, since these figures were reported for 2009, the city has taken more steps to increase efficiency.

The Fullerton and Brea fire departments have merged command staffs, resulting in significant savings; and three department head positions have been vacant since January (maintenance services, parks and recreation, and redevelopment and economic development). There are no immediate plans to fill those jobs, Palmer she said.

You can [see pay detail on Fullerton city workers here](#). A breakout on [full-time workers only is here](#).

PUBLIC SAFETY

Fullerton is one of the old O.C. cities that has its own fire and police departments. [It spent 69.7 percent of its general fund budget on public safety last year.](#)

These costs are weighing down many older cities: [Santa Ana spent 77 percent of its budget on police and fire last year, while Westminster, Stanton and Garden Grove also spent more than 70 percent on public safety.](#) (Vallejo declared bankruptcy after those costs reached 80 percent, so it's something to watch for. The more money that goes here, the less that goes to other city programs like parks and maintenance.)

FIRE: As one of the grande dames, Fullerton has its own fire department (newer cities contract with the Orange County Fire Authority for service).

- ▶ Fullerton reported 106 total paid positions in the fire department, including a handful of part-timers. Average comp was \$104,714.
- ▶ Counting only full-timers, and there were 100 employees, with average comp of \$110,557.
- ▶ [See details of fire department comp here.](#)

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Twenty six percent of **Fullerton** city workers earned more than **\$100,000** in total compensation in 2009 — and **seven** earned more than **\$200,000**, according to figures from the state controller's office.

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Why?

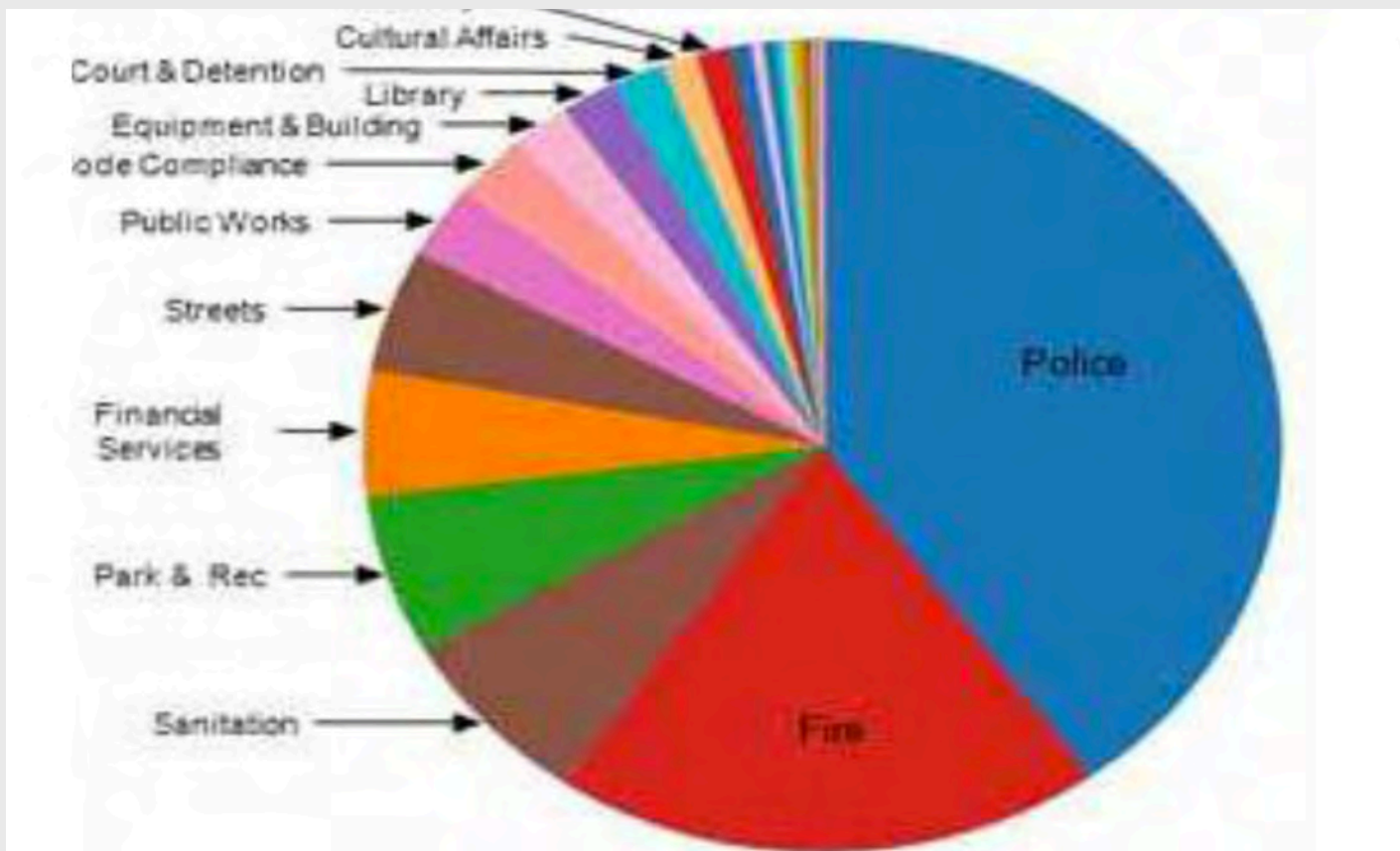
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Average total compensation for all **1,013** reported positions — including **part-timers** — was **\$64,563**. Of those, **262** made more than **\$100K**.

26 percent —
repeating the
lede.

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Department	Classification	Total Wages Subject to Medicare (Box 5 of W-2)	Applicable Defined Benefit Pension Formula	Employees' Share of Pension Contributions	Deferred Compensation	Health, Dental, Vision	Total
Police	Police Captain	\$256,376	3%@50	\$7,457	0	0	\$263,833
Fire	Battalion Chief	\$176,473	3%@50	\$6,704	0	\$28,656	\$211,833
Fire	Battalion Chief	\$200,610	3%@50	\$4,623	0	0	\$205,233
Fire	Fire Chief	\$193,932	3%@50	\$8,915	0	0	\$202,847
Fire	Fire Marshal/Division Chief	\$156,689	3%@50	\$7,288	0	\$28,656	\$192,633
Fire	Division Chief - Operations	\$161,700	3%@50	\$7,443	0	\$23,287	\$192,430
Police	Police Captain	\$176,788	3%@50	\$7,895	0	0	\$184,683
Police	Police Lieutenant	\$157,580	3%@50	\$6,893	0	\$15,916	\$180,389
Police	Police Lieutenant	\$157,580	3%@50	\$6,893	0	\$15,916	\$180,389
Fire	Battalion Chief	\$140,998	3%@50	\$5,210	0	\$28,656	\$174,864
Police	Police Lieutenant	\$155,508	3%@50	\$6,893	0	\$9,833	\$172,234



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Finding the Patterns & Outliers: That's Where the Story Is

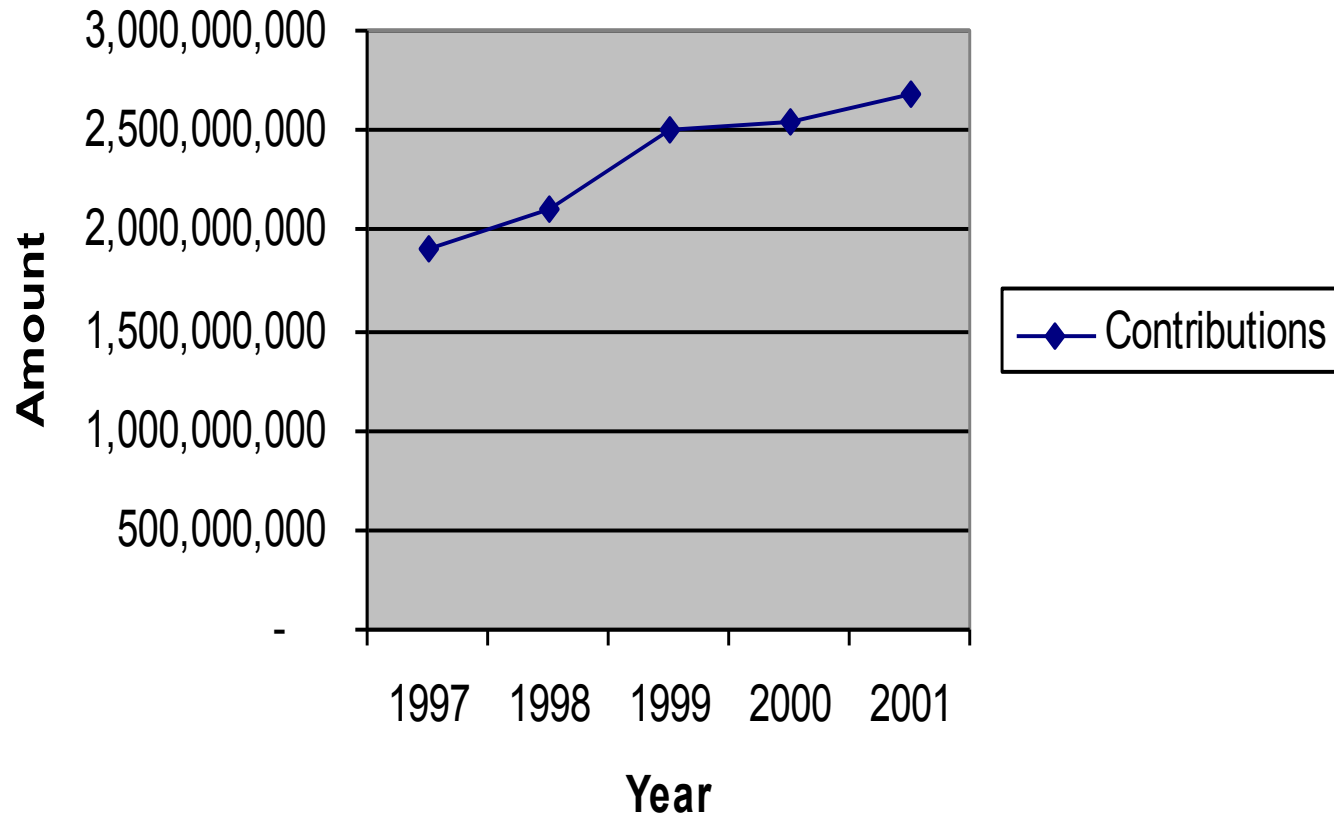
- Spreadsheets are always a good place to start
 - Sorting
 - Filtering
 - Pivot Tables
 - Basic Charts
- Structured Query Language for databases
 - Sorting & Filtering
 - Group By
 - Joins
- Mapping
 - Google Fusion Tables
 - Tableau Public (no geocoding)
 - Esri Arcmap (paid)/Esri Storymaps (free version)
 - CartoDB
 - Mapbox
 - QGIS (open-source)

Using the Information to Find Trends

National Center for Charitable Statistics data:

Microsoft Access - [ALLCHARITIESOVERTIME : Table]								
File Edit View Insert Format Records Tools Window Help								
EIN	NAME	STATE	NTEE1	NTEEC	10cat	ADDRESS	CITY	
042960005	LETS FACE IT U S A	WA	P	P80	HUMAN SERVI	PO BOX 29972	BELLINGHAM	
112985426	CRANKY DESTROYERS	WA	D	D99	HUMAN SERVI	12520 14TH AV	SEATTLE	
133209618	GIRAFFE PROJECT INC	WA	D	D99	ENVIRONMENT	BOX 759	LANGLEY	
133404830	U S INTERRELIGIOUS COMMITTEE FOR PEACE IN TH	WA	Q	Q40	INTERNATIONA	922 131ST NW	MARYSVILLE	
133444882	EATING DISORDERS AWARENESS & PREVENTION II	WA	G	G70	HEALTH	603 STEWART	SEATTLE	
133747419	R MYERS FOUNDATION	WA	Z	Z99	UNKNOWN	3315 NE 112TH	VANCOUVER	
136106503	SPAFFORD CHILDRENS CENTER ASSOCIATION	WA	L	L41	HUMAN SERVI	4550 132ND AV	BELLEVUE	
141752216	ANIMAL PEOPLE INC	WA	D	D20	ENVIRONMENT	PO BOX 960	CLINTON	
222207869	GLASS ART SOCIETY INC	WA	A	A40	ARTS, CULTUR	1305 FOURTH	SEATTLE	
222601914	FOUNDATION FOR COMMUNITY ENCOURAGEMENT I	WA	S	S20	PUBLIC, SOCIE	PO BOX 17210	SEATTLE	
222968673	UNIDENTIFIED MOVING OBJECTS COMPANY INC	WA	A	A99	ARTS, CULTUR	PO BOX 347	VASHON	
223190778	AWARENESS SOCIETY A NEW JERSEY NONPROFIT	WA	B	B99	EDUCATION	26331 NE VALL	DUVALL	
226059828	AMERICAN GLOXINIA & GESNERIAD SOCIETY INC	WA	C	C42	ENVIRONMENT	2913 N MONROE	TACOMA	
231663798	EUROPEAN CHRISTIAN MISSION	WA	X	X20	RELIGION-REL	PO BOX 1006	POINT ROBE	
232616113	MAX ARONOFF VIOLA INSTITUTE	WA	A	A6E	ARTS, CULTUR	6302 54TH AVE	TACOMA	
237004247	SEATTLE DRUG & NARCOTIC CENTER SEADRUGER	WA	F	F22	HEALTH	PO BOX 24344	SEATTLE	
237005501	KADLEC MEDICAL CENTER FOUNDATION INC	WA	E	E11	HEALTH	888 SWIFT BLV	RICHLAND	
237005522	TACOMA YOUTH SYMPHONY ASSOCIATION INC	WA	A	A19	ARTS, CULTUR	PO BOX 660	TACOMA	
237005526	WENATCHEE CMIC BALLET	WA	A	A63	ARTS, CULTUR	PO BOX 2053	WENATCHEE	
237013307	METHOW VALLEY HOME HEALTH AGENCY INC	WA	E	E62	HEALTH	PO BOX 66	TWISP	
237013318	SPOKANE ART SCHOOL INC	WA	A	A25	ARTS, CULTUR	920 N HOWARD	SPOKANE	
237014921	EPIPHANY SCHOOL	WA	B	B24	EDUCATION	3710 E HOWEL	SEATTLE	
237017467	CENTRAL WASHINGTON UNIVERSITY FOUNDATION	WA	B	B11	EDUCATION	CENTRAL WAS	ELLENSBUR	
237018066	PARENTS WITHOUT PARTNERS INC SOUTH SNO KIN	WA	P	P42	HUMAN SERVI	PO BOX 5670	LYNNWOOD	
237022221	SAN JUAN HISTORICAL SOCIETY	WA	A	A80	ARTS, CULTUR	PO BOX 441	FRIDAY HAR	
237023360	MOUNTAINEERS FOUNDATION	WA	T	T22	PUBLIC, SOCIE	300 THIRD AVE	SEATTLE	
237027191	FRANKLIN COUNTY HISTORICAL SOCIETY	WA	A	A80	ARTS, CULTUR	305 N FOURTH	PASCO	
237034379	LITTLE LEAGUE BASEBALL INC 4470905	WA	N	N63	HUMAN SERVI	28 CHELAN KE	BELLEVUE	
237036375	BELLINGHAM CHRISTIAN SCHOOL INC	WA	B	B24	EDUCATION	1600 E SUNSE	BELLINGHAM	
237039840	CONSTRUCTION WORKERS CHRISTIAN FELLOWSHIP	WA	X	X20	RELIGION-REL	610 N FIRST A	KELSO	
237041773	CROSS CURRENTS MINISTRIES	WA	B	B99	EDUCATION	PO BOX 28444	BELLINGHAM	

Washington Non-profit Contributions Over Time



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What is the Story?

Does your visual
storytelling back up your
nut graf or theme?



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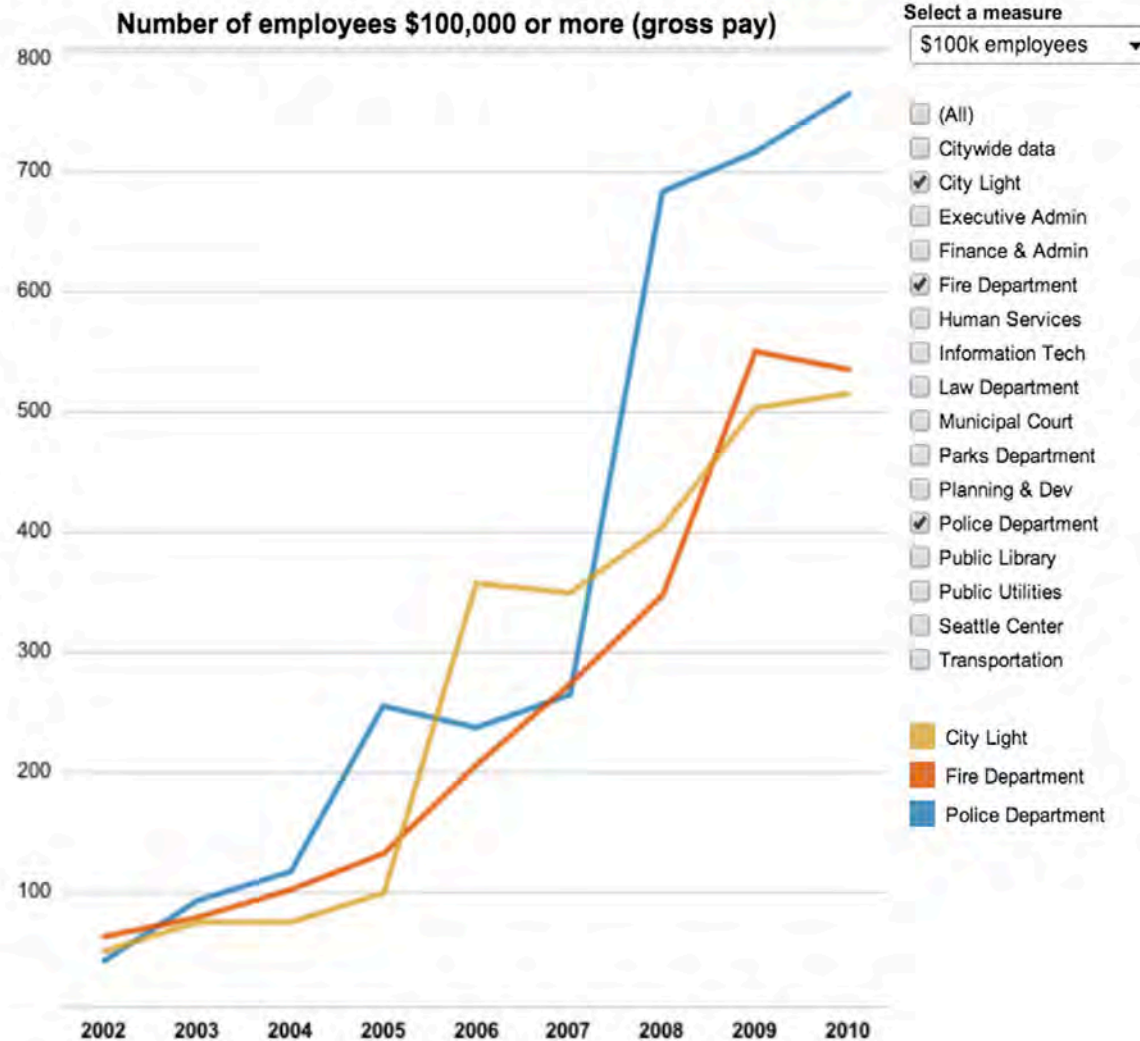
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City of Seattle's highest-paid employees by department

The number of city of Seattle employees making at least \$100,000 increased more than tenfold since 2002. Last year, about one in five employees made that much. Using this interactive chart, you can explore payroll data for the city's biggest departments, including how many employees made six figures and each department's median pay and overtime. Hover over the lines or click to see each year's data. [Read story](#)



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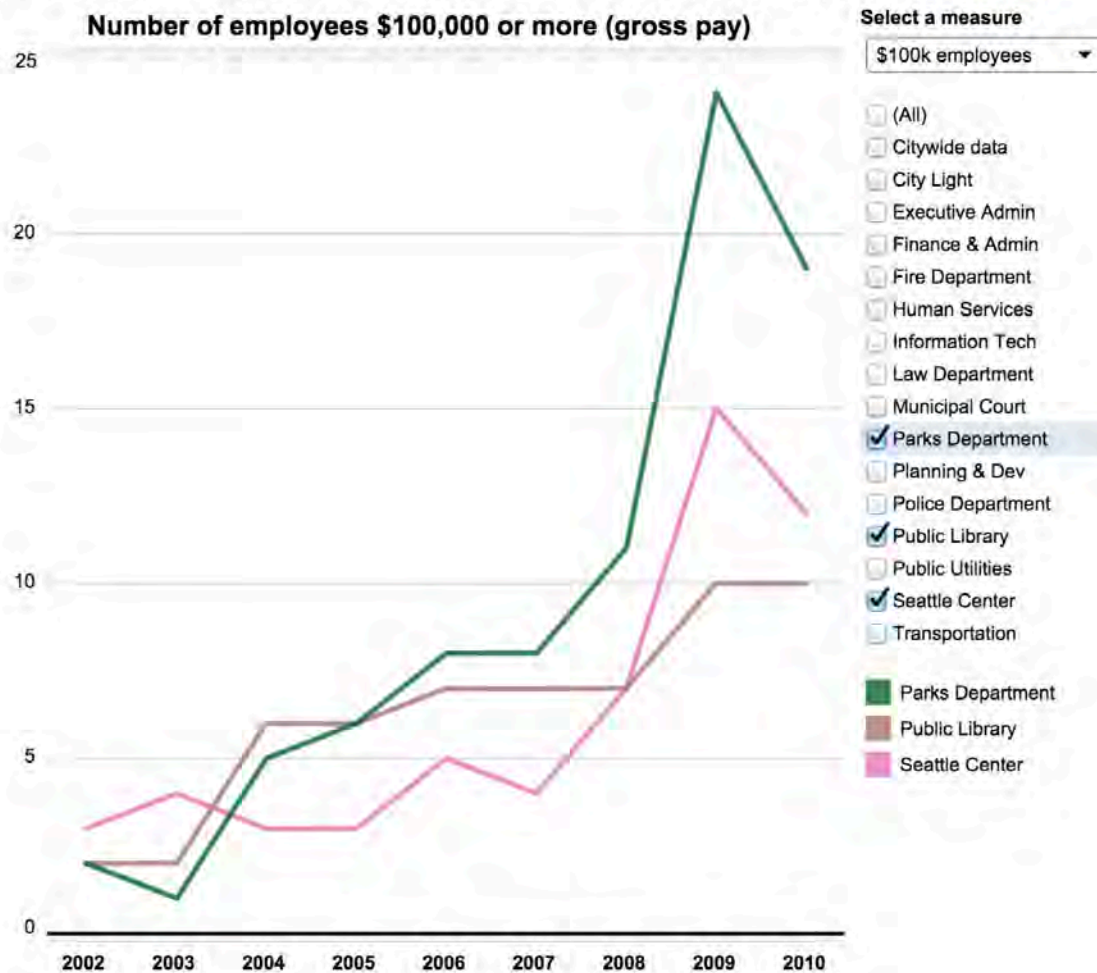
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Are There Patterns That Tell the Story?

- Chapters?
- By Issue?
- Over time?
- Geographically?

Circle back at the end.

Name	City	State	Total	Present	Male	Female	Births	Relocated	580	479	As of
Ablene Zoo	Ablene	TX	6	0	0	0	0	3	3		7/10/12
African Safari Wildlife Park		OH									
Akron Zoological Park		OH	0	0	0	0	0	0	0		

GLAMOUR BEASTS: *The dark side of elephant captivity*

Bergen County Zoological Park		NJ									
Binder Park Zoo		MI									
Binghamton Zoo at Ross Park		NY									
Birmingham Zoo	Birmingham	AL	8	4	4	0	0	2	2		7/10/12
Blank Park Zoo	Des Moines	IA	2	0	0	0	0	1	1		7/10/12
Boston Metroparks Zoo	Boston	MA	2	0	0	0	0	1	1		7/10/12
Bramble Park Zoo		SD									
Bronx Zoo	Bronx	FL									
	Chicago	NY	31	3	0	3	1	7	21		7/10/12
		IL	28	0	0	0	0	11	17		7/10/12
		SC									
	Buffalo	NY	19	2	0	2	0	11	6		7/10/12
Tampa Bay (Busch Gardens Africa)	Tampa	FL	36	5	0	5	3	16	15		7/10/12
rk Zoo, New Bedford	New Bedford	MA	3	2	0	2	0	1	0		7/10/12
	Tyler	TX	8	3	0	3	0	3	2		7/10/12
	Waco	TX	5	2	0	2	0	1	2		7/10/12
		NJ									
		MA									
		FL									
	New York	NY	14	0	0	0	0	7	7		7/10/12
		ND									
		CA									
		TN									
	Albany	GA	3	0	0	0	0	3	0		7/10/12
	Colorado Springs	CO	9	4	0	4	0	3	2		7/10/12
		MI									
	Cincinnati	OH	15	4	1	3	1	5	6		7/10/12
	Cleveland	OH	23	6	1	5	1	9	8		7/10/12
		PA									
	Powell	OH	26	4	2	2	3	14	8		7/10/12
		MN									
		CT									
		IL									
		CA									
		ND									
	Dallas	TX	16	5	0	5	0	5	6		7/10/12
	Emporia	KS									
	Denver	CO	13	4	2	2	0	6	3		7/10/12
	Royal Oak	MI	9	0	0	0	0	5	4		7/10/12
	Springfield	MO	35	4	1	3	10	21	10		7/10/12
		FL	22	12	4	8	8	6	4		7/10/12
	El Paso	TX	4	2	0	2	0	1	1		7/10/12
		TX									
		PA									
	Erie	PA	7	0	0	0	0	4	3		7/10/12
	Lincoln	NE	1	0	0	0	0	1	0		7/10/12
	Fort Wayne	IN	1	0	0	0	0	1	0		7/10/12
	Fort Worth	TX	27	5	1	4	6	10	12		7/10/12
		TX									
		MA									
		CA									
	Brownsville	TX	11	0	0	0	4	4	7		7/10/12
	Peoria	IL	5	0	0	0	0	4	1		7/10/12
		SD									
	Greenville	SC	4	2	0	2	0	2	0		7/10/12
		MT									
	San Jose	CA	4	0	0	0	0	4	0		7/10/12
	Madison	WI	10	0	0	0	0	7	3		7/10/12
		IL									
	Hershey	PA	1	0	0	0	0	1	0		7/10/12
	Salt Lake City	UT	11	3	0	3	2	0	8		7/10/12
	Honolulu	HI	9	2	0	2	0	2	5		7/10/12
	Houston	TX	28	7	3	4	16	6	15		7/10/12
		KS									
	Port Clinton	OH	1	0	0	0	0	1	0		7/10/12
	Indianapolis	IN	16	8	1	7	6	6	2		7/10/12
	Somerset County	PA	6	5	1	4	0	1	0		7/10/12
	Jackson	MS	3	0	0	0	0	2	1		7/10/12
	Jacksonville	FL	21	4	1	3	1	14	3		7/10/12
		MI									



BENJAMIN BENSCHNEIDER / THE SEATTLE TIMES

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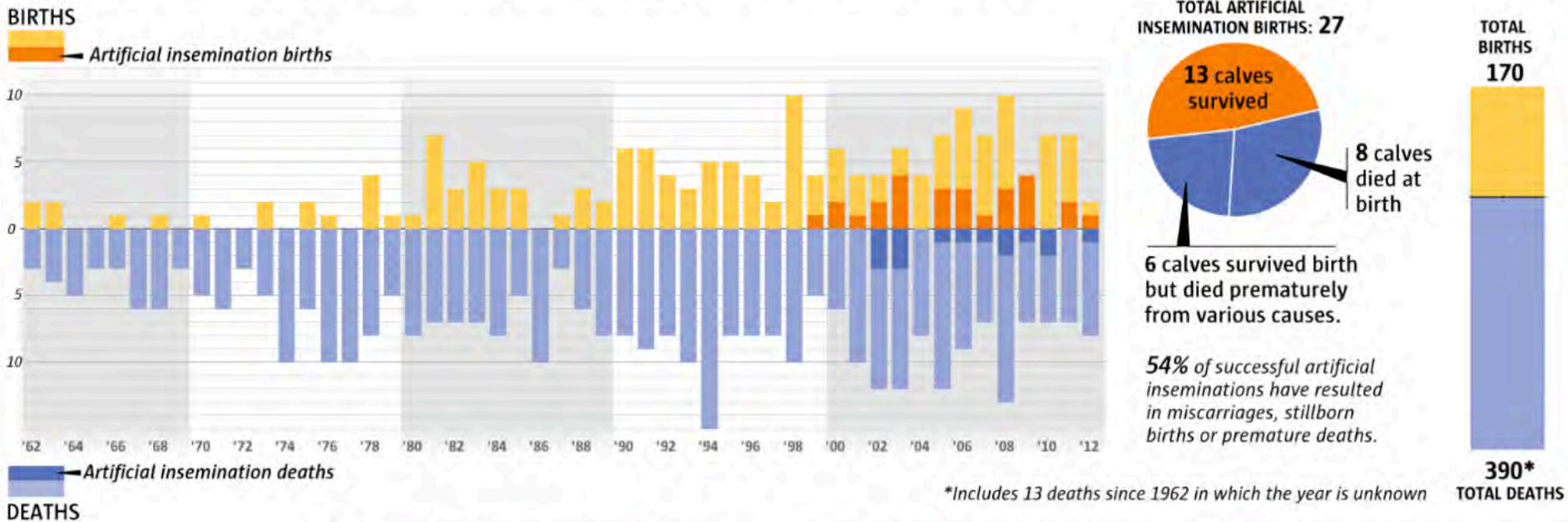
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Zoo elephants: 50 years of life and death

Over the past 50 years, elephant deaths in U.S. zoos have outstripped births by a ratio of 2-to-1. Zoos have tried to replenish the ranks of captive elephants with an aggressive artificial-insemination program, but results have been inadequate.



Source: Association of Zoos and Aquariums, October 2012

Research and reporting by MICHAEL I. BERENS

Graphics by MARK NOWLIN / THE SEATTLE TIMES

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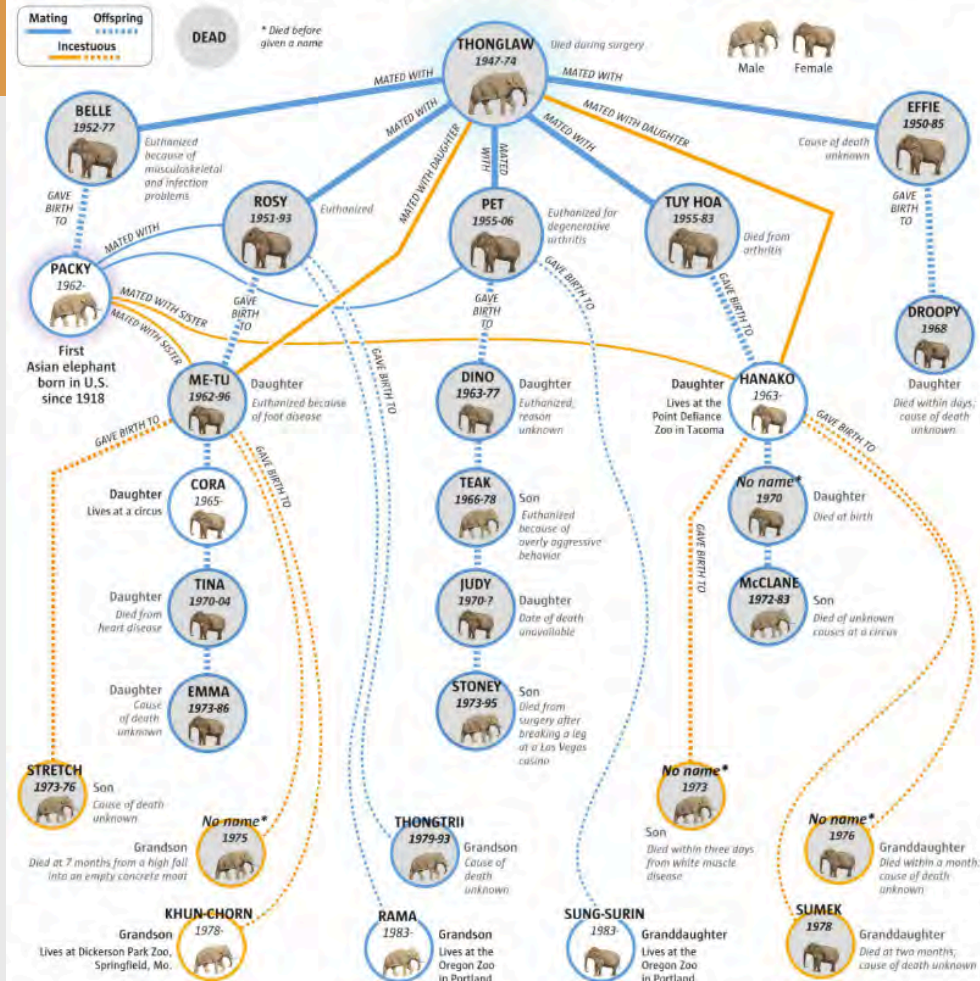
The troubled history of an elephant family

Fifty years ago, Packy became the first elephant born in a U.S. zoo, captivating millions of people far beyond Seattle, where he was conceived, and Portland, where he was born. The birth and economic boon from Packy-mania set off a quest by zoos for their own baby elephants – a quest that continues today. Obscured has been the troubled

family history of Packy and his father, Thonglaw. Following long-abandoned practice, the Oregon Zoo mated Thonglaw with his daughters and Packy to his sisters, producing damaged offspring. Thonglaw died at age 27 from an adverse reaction to anesthesia during surgery for chronic foot disease, which is linked to captivity. Packy's

mother, Belle, was euthanized because of a foot infection. One family member was euthanized for being too aggressive. Another died during surgery to repair a broken leg suffered at a Las Vegas casino.

Of the 22 offspring of Thonglaw and Packy, six elephants are still living.



Source: Asian Elephant, North American Regional Studbook
See an interactive version of this chart at seattletimes.com/elephants

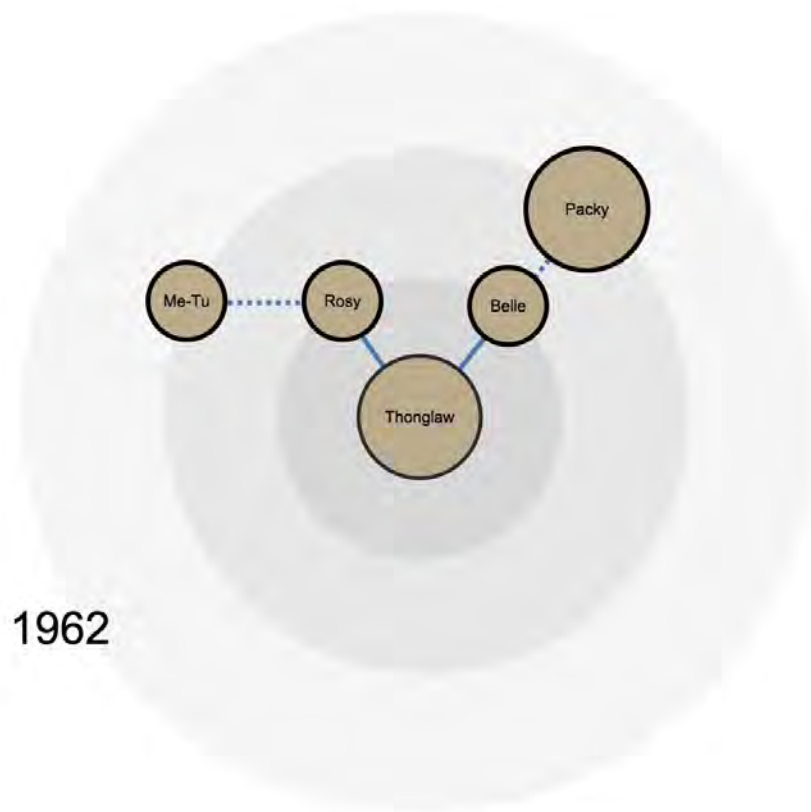
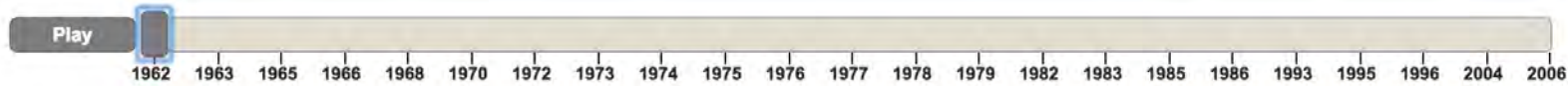
Research and reporting by MICHAEL J. BERENS, Graphable by MARK NOWLIN / THE SEATTLE TIMES

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ALIVE

DEAD

MATING

OFFSPRING

INCESTUOUS



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Is There One Narrative Touchpoint?

The Seattle Times PHARMA'S WINDFALL ▾

PHARMA'S WINDFALL

The mining of rare diseases

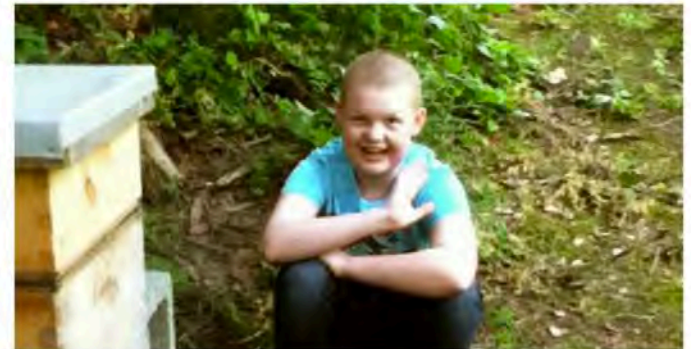
Thirty years ago, Congress acted to spur research on rare diseases. Today, we have hundreds of new drugs — along with runaway pricing and market manipulation, as drugmakers turn a law with good intentions into a profit engine.

By MICHAEL J. BERENS and KEN ARMSTRONG



Her vision failed first.

Then she fell asleep at school from inexplicable fatigue. Even walking proved difficult, often impossible, as she knocked into furniture and walls. It was like an electrical switch in her body toggled without warning. Some days she was in control, most she was not.



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DATA ON PURPOSE

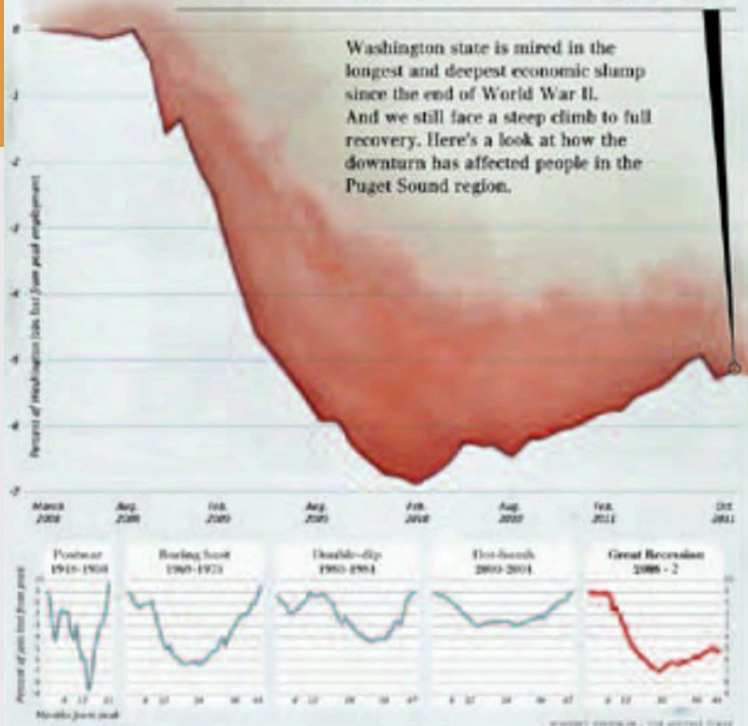
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We are here

Washington state is mired in the longest and deepest economic slump since the end of World War II. And we still face a steep climb to full recovery. Here's a look at how the downturn has affected people in the Puget Sound region.



BY STEVE BIRCHFIELD / Seattle Times business reporter

For most of us, Washington's economy has never been this bad.

When the mortgage bubble popped, we've lost more jobs faster, and recovered more slowly, than at any time since the first end of World War II. Our indicators show slumps such as the housing then, the early '80s double-dip and the dot-com crash fairly a dime a dozen.

And things aren't likely to get better anytime soon. Consulting firms like Gartner recently estimated that Washington won't regain all its lost jobs until the end of 2014. If that forecast pans out, they would be the state's slowest recovery in a decade.

A lot of us are feeling the pain, even if we've managed to re-locate our own jobs, homes and family elsewhere. Everyone knows someone who was laid off more years ago and is still out of work, or

someone who's stuck with a house she can't sell and a mortgage she can't pay.

Nearly 36,000 Puget Sound-area residents have been unemployed as long as their benefits have run out. More than 42,000 area houses have been repossessed since the start of 2008. And one of every four people in Kent is over budget.

As the charts and graphs on A25 show, the recession has fallen hardest on people in the lower-middle and working classes — folks who were just getting by or maybe starting to make some headway before the economy fell out. Sometimes, of course, exposure to the hardest hit areas and sectors, or the particular nature of economic dislocation the slump has engendered. But they can at least help us understand what's happening and to whom.

Steve Barchfeld: 206-464-6147 or sbarchfeld@seattletimes.com

WEB EXTRA

Conversation on seattletimes.com

Join a conversation of 104 comments and Seattle Times business reporters to talk about the latest recession's toll on the Puget Sound area's A25.

Inside: Hiding out a rough economy
A cycle-numbers look at tough times in the Puget Sound area's A25



Riding out a rough economy

Jobs and income

Cuts hit the middle class the hardest

The slump has been tough on almost everyone in the Seattle area, but middle-wage workers — the people who pound drywall, manage payroll and answer customer complaints — lost the most jobs. On the other hand, there are actually more jobs now for the highest-paying professions — physicians, software engineers and top managers of all kinds. That doesn't help critics that the economy is rigged to favor those who are already well-off.

Percentage of Seattle-area jobs gained or lost between 2008 and 2011, by wage level



Finding a new job is tougher

Hiring during this so-called "recovery" has been excruciatingly slow. The local economy lost 127,300 jobs during the recession. 19 months after the bottom of the cycle, it has regained only 88,500, and thousands of people have exhausted all 90 weeks of their unemployment benefits.

Includes the number of unemployment insurance (UI) claims with the last exhausted of all weeks of unemployment benefits. Data as of July 2011. Department of Employment and Training Statistics.

Source: Department of Employment and Training Statistics, based on Department of Employment and Training Statistics data

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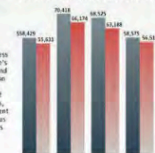
Source: Department of Employment and Training Statistics, based on Department of Employment and Training Statistics data

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Source: Department of Employment and Training Statistics, based on Department of Employment and Training Statistics data

Household incomes have shrunk



Source: Department of Employment and Training Statistics, based on Department of Employment and Training Statistics data

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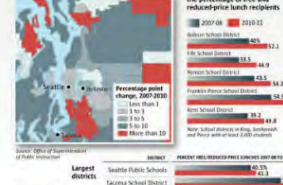
Source: Department of Employment and Training Statistics, based on Department of Employment and Training Statistics data

Food and health

More children get free or reduced-price lunches

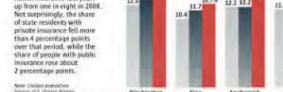
Another indicator of need: Most Washington school districts are serving more free or reduced-price lunches than before the recession. In the four-county Puget Sound region alone (King, Pierce, Snohomish and Kitsap), nearly 100,000 children — more than a third of total enrollment — received free or reduced-price lunches last school year.

Free and reduced-price lunches 2007-2010



More people lack health insurance

Linking your job often means linking health coverage as well. One in every seven Washingtonians lost their health insurance last year, but there is a bright spot: Not surprisingly, the share of state residents with private insurance fell more than 10 percentage points over that period, while the share of people with public insurance rose about 2 percentage points.

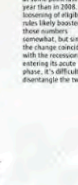


Explore more data on food and health at seattletimes.com

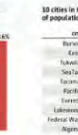
Applications for food stamps have soared

Nearly 100,000 more King County residents received food stamps at some point last year than in 2008. A loosening of eligibility rules likely helped those numbers, but since the change coincided with the recession, it's difficult to disentangle the two.

Food stamp recipients



10 cities in King, Snohomish and Pierce counties with highest percentage of population on food stamps



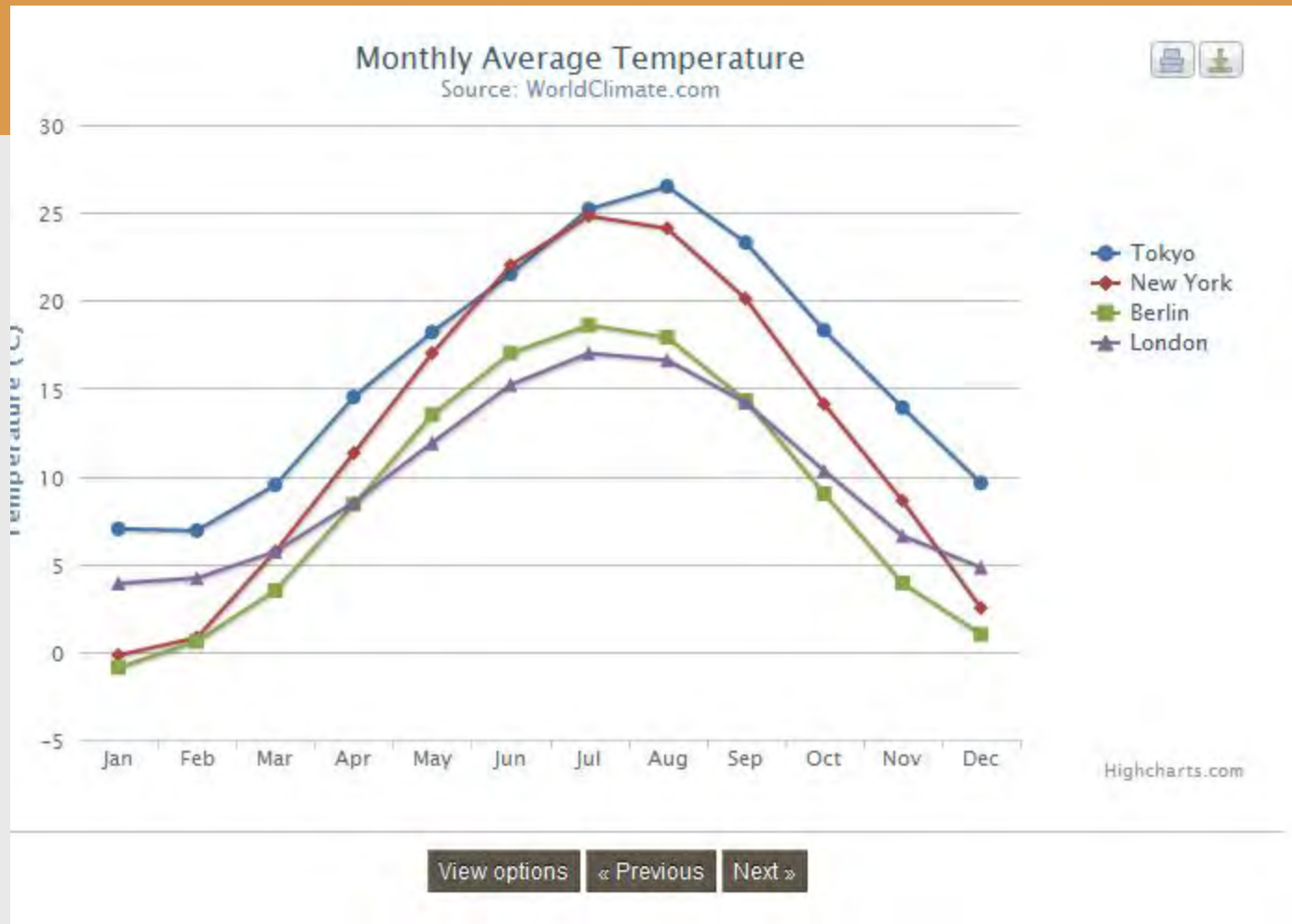
Explore more data on food and health at seattletimes.com

Finding the Patterns & Outliers: That's Where the Story Is

Visualizing the data

- Plotly
- Highcharts
- Silk
- Tableau Software and Tableau Public
- Javascript

Highcharts



<http://www.highcharts.com>

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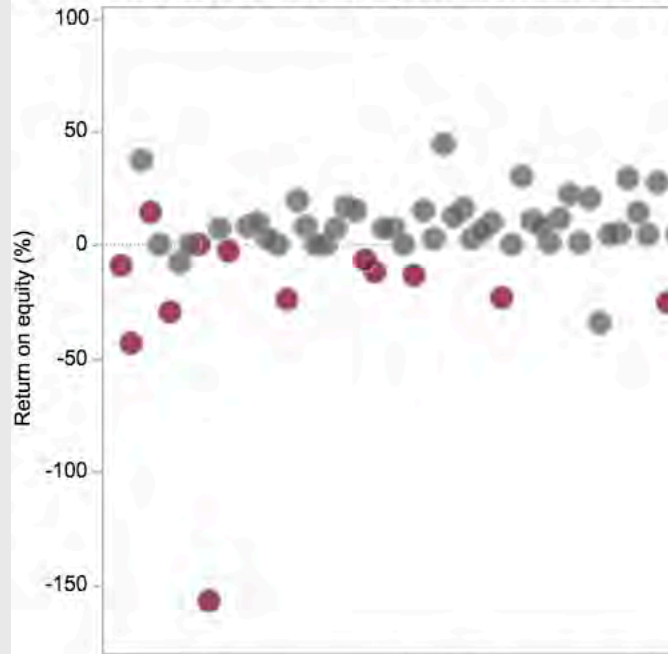
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Tableau Public

Select a dot to see return on equity details for that company:



Data analysis by Drew DeSilver, visualization

+tableau+public

Microsoft exceeds expectations

Percent change from year-earlier period

Profit/loss -0.4%
In millions of dollars

Earnings per share +4.1%
In dollars and cents

Sales +5.0%
In billions of dollars



52-week stock performance

Daily closing prices through Jan. 27, 2011, when results were reported.



Sources: Microsoft, Bloomberg News
THE SEATTLE TIMES

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Visualizations as sidebars

METHADONE AND THE POLITICS OF PAIN

Silent deaths

Politics of pain

A troubled clinic



PHOTO BY MIKE SIEGEL / THE SEATTLE TIMES

Sara Taylor, mother of former King County 911 dispatcher Angeline Burrell, describes her daughter's battle with disabling chronic pain and her overdose death from methadone. At left is Taylor's husband, Dale.

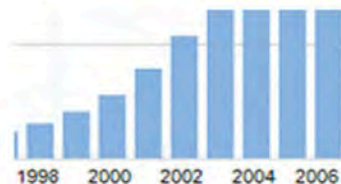
State pushes prescription painkiller methadone, saving millions but costing lives

To cut costs, Washington steers Medicaid patients to a narcotic that costs less than a dollar a dose. The state insists methadone is safe. But hundreds die from it each year — and more than anyone else, it's the poor who pay the price.

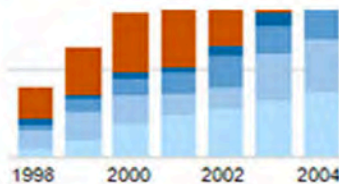
MORE IN THE SERIES:

- Update: 'Preferred' pain drug now called last resort
- Update: State plans emergency warning on risks of methadone
- 📺 Video: Methadone's toll
- 📅 Timeline: State defends methadone as deaths rise
- Silent deaths: source documents
- How we did it: our analysis
- Seattle Times methadone investigation wins 2012 Pulitzer Prize
- 🏆 Times awarded Selden Ring Award for Investigative Reporting

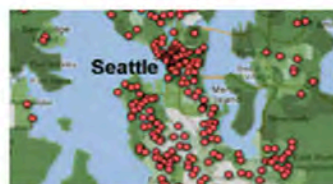
Methadone consumption and deaths: Numbers tell the story



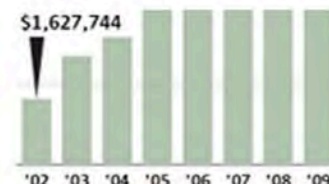
Interactive: Use has skyrocketed since state put drug on list



Interactive: More deaths from methadone than other drugs



Interactive: In Washington, victims are clustered in poorer areas



Graphic: The costs of hospital care linked to methadone have skyrocketed



Interactive: Nationwide, Washington stands out as one of the worst states



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Bridges



7 low highway bridges hold similar risks to Skagit span

By Mike Lindblom 
Cheryl Phillips

Washington state has seven other highway bridges with clearances as low as the Interstate 5 Skagit River bridge, where an overheight load destroyed one of four spans last week.

That fact suggests that without tougher oversight of cross-state hauling, the same kind of accident could happen again.

Environment | Local news | Transportation

Span wasn't built to take critical hit

Originally published May 24, 2013 at 12:19 am | Updated May 24, 2013 at 6:37 am



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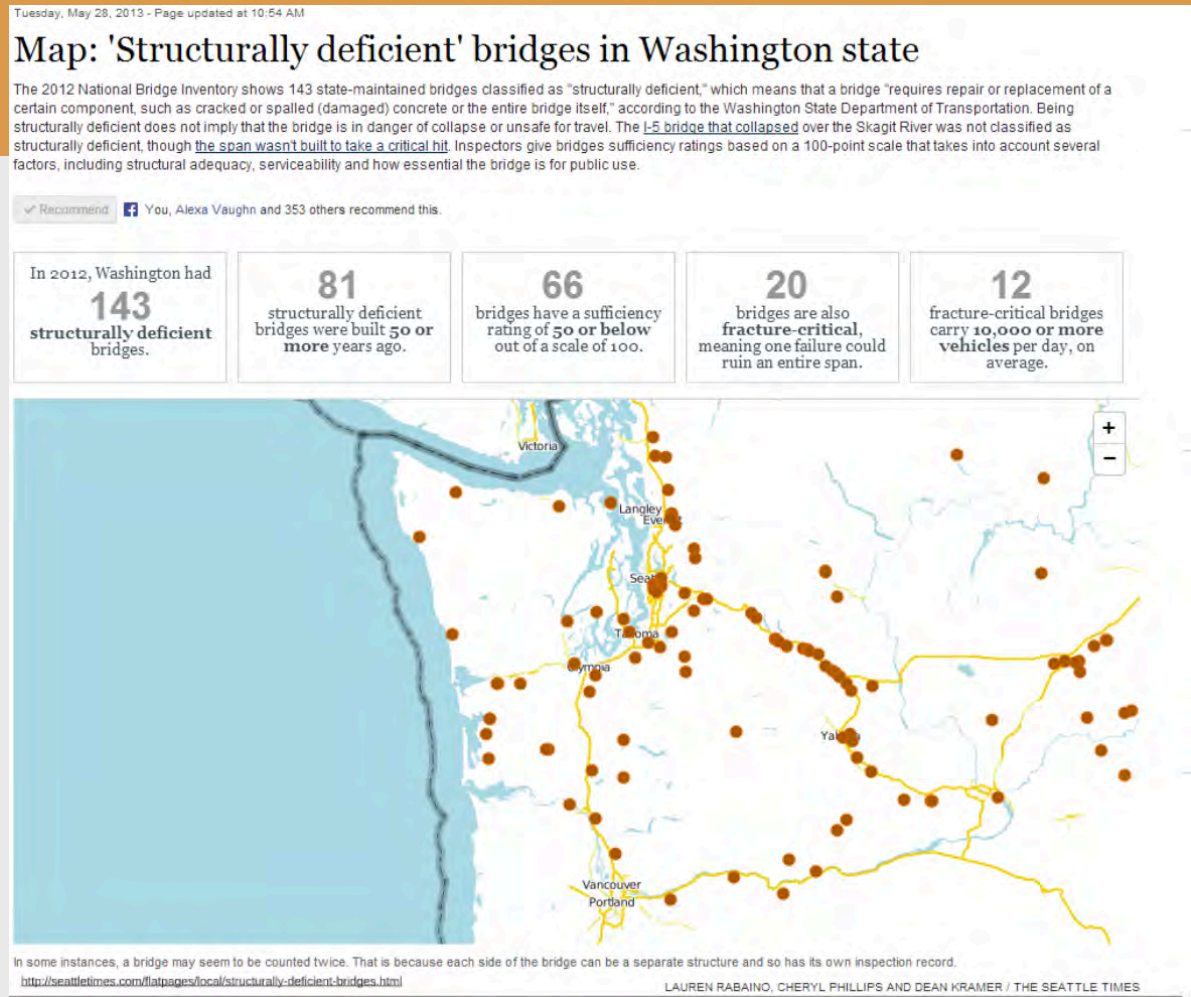
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Bridges

Began as a

Google Fusion Table

Was analyzed in
Excel and a SQL
database
Refined for
presentation in
Mapbox



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Oso Landslide



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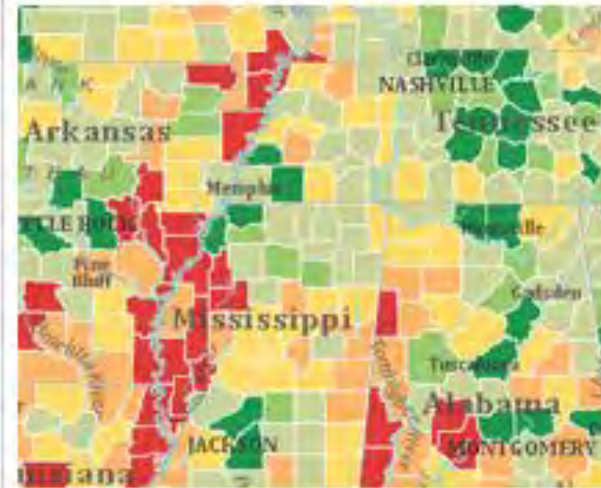
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ESRI Mapping for Everyone



Make a Nuclear Proximity Map

See how close you are to U.S. nuclear plants.



Make a Demographic Map

Make and share a map of a selected area in the U.S. showing various census data.

<http://www.esri.com/mapping-for-everyone>



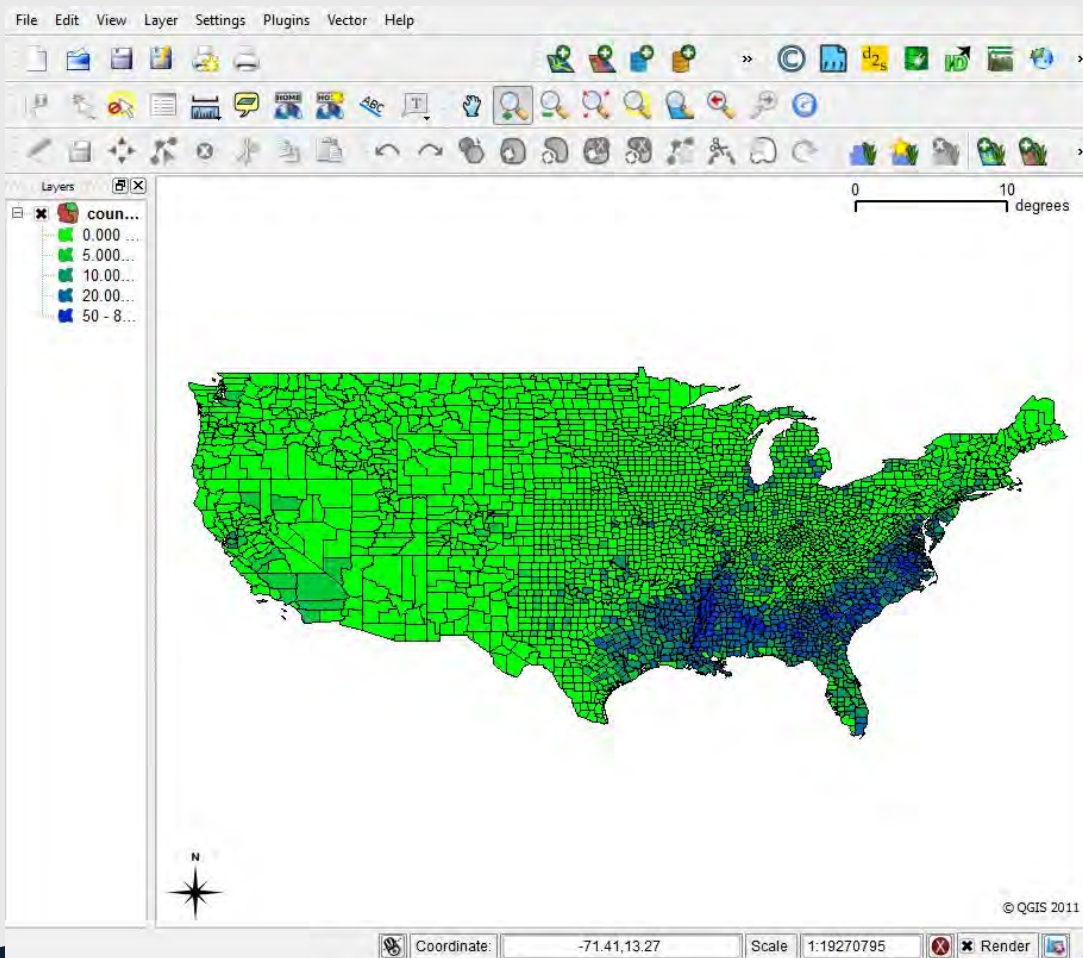
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QGIS (qgis.org)



Timothy Barmann tutorials:

Intro:

[http://
tbarmann.webfactional.com/
nicar/qgis_tutorial/](http://tbarmann.webfactional.com/nicar/qgis_tutorial/)

Dynamic maps:

[http://
tbarmann.webfactional.com/
nicar/js_mapping/tutorial/](http://tbarmann.webfactional.com/nicar/js_mapping/tutorial/)

[http://www.esri.com/
mapping-for-everyone](http://www.esri.com/mapping-for-everyone)

Mind the Gap

Contributions



Special events



Expenses



Form 990 **Return of Organization Exempt From Income Tax** **2000** **Open to Public Inspection**

Under section 501(c) of the Internal Revenue Code (except black lung benefit trust or private foundation), section 527, or section 4947(a)(1) nonexempt charitable trust

The organization may have to use a copy of this return to satisfy state reporting requirements

OMB No. 1545-0047

Department of the Treasury
Internal Revenue Service

A For the 2000 calendar year, or tax year period beginning July 1, 2000, and ending June 30, 2001

B Check if applicable: ☐ Change of address, ☐ Change of name, ☐ Initial return, ☐ Final return, ☐ Amended return

C Name of organization: KCTS TELEVISION
Number and street (or P.O. box if mail is not delivered to street address): 401 Mercer Street
City or town, state or country, and ZIP code: Seattle, WA 98109-4640

D Employer identification number: 91 1221895

E Telephone number: (206) 728-6463

F Check ☐ if application pending

G Organization type (check only one): ☒ 501(c)(3) (insert no.) ☐ 527 or ☐ 4947(a)(1)

* Section 501(c)(3) organizations and 4947(a)(1) nonexempt charitable trusts must attach a completed Schedule A (Form 990 or 990-EZ)

J Accounting method: ☐ Cash, ☒ Accrual, ☐ Other (specify):

K Check here ☐ if the organization's gross receipts are normally not more than \$25,000. The organization need not file a return with the IRS, but if the organization received a Form 990 Package in the mail, it should file a return without financial data. Some states require a complete return.

L Check this box if the organization is not required to attach Schedule B (Form 990 or 990-EZ): ☐

Part I Revenue, Expenses, and Changes in Net Assets or Fund Balances (See Specific Instructions on page 16)

1 Contributions, gifts, grants, and similar amounts received	1a	18,664,135	1d	19,149,928
a Direct public support	1b	0	2	649,532
b Indirect public support	1c	485,793	3	0
c Government contributions (grants)			4	84,219
d Total (add lines 1a through 1c) (cash \$ 18,515,416; noncash \$ 634,512)			5	333,863
2 Program service revenue including government fees and contracts (from Part VII, line 93)			6a	0
3 Membership dues and assessments			6b	0
4 Interest on savings and temporary cash investments			6c	0
5 Dividends and interest from securities			7	0
6a Gross rents				
b Less rental expenses				
c Net rental income or (loss) (subtract line 6b from line 6a)				
7 Other investment income (describe):				
8a Gross amount from sales of assets other than inventory	(A) Securities	1,047,223	8a	0
b Less cost or other basis and sales expenses		1,048,548	8b	821
c Gain or (loss) (attach schedule)		(1,325)	8c	(821)
d Net gain or (loss) (combine line 8c, columns (A) and (B))			8d	(2,146)
9 Special events and activities (attach schedule)				
a Gross revenue (not including \$ 2,308,011 of contributions reported on line 1a)	9a	1,630,559	9b	1,470,248
b Less direct expenses other than fundraising expenses				
c Net income or (loss) from special events (subtract line 9b from line 9a)			9c	160,311
10a Gross sales of inventory less returns and allowances	10a	17,655	10b	18,529
b Less cost of goods sold				
c Gross profit or (loss) from sales of inventory (attach schedule) (subtract line 10b from line 10a)			10c	(874)
11 Other revenue (from Part VII, line 103)			11	433,477
12 Total revenue (add lines 1d, 2, 3, 4, 5, 6c, 7, 8d, 9c, 10c, and 11)			12	20,858,310
13 Program services (from line 44, column (B))			13	12,405,706
14 Management and general (from line 44, column (C))			14	3,408,675
15 Fundraising (from line 44, column (D))			15	4,134,370
16 Payments to affiliates (attach schedule)			16	
17 Total expenses (add lines 16 and 44, column (A))			17	19,948,751
18 Excess or (deficit) for the year (subtract line 17 from line 12)			18	909,559
19 Net assets or fund balances at beginning of year (from line 73, column (A))			19	13,561,960
20 Other changes in net assets or fund balances (attach explanation)			20	17,523
21 Net assets or fund balances at end of year (combine lines 18, 19, and 20)			21	14,489,042

RECEIVED MAY 23 2002 IRS-OSC OGDEN, UT

POSTMARK DATE MAY 15 2002

Net Assets

Expenses

The bottom line

Mind the Gap



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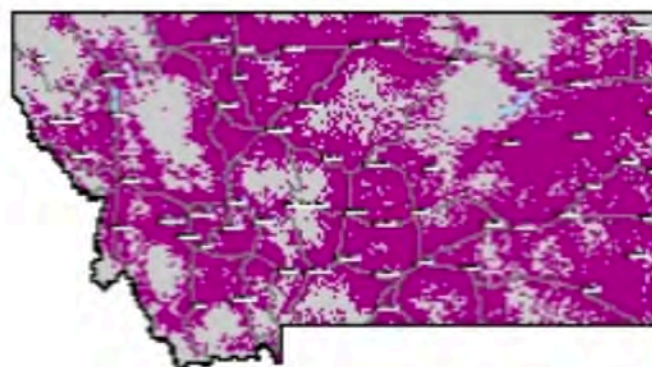
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STCellularWireless

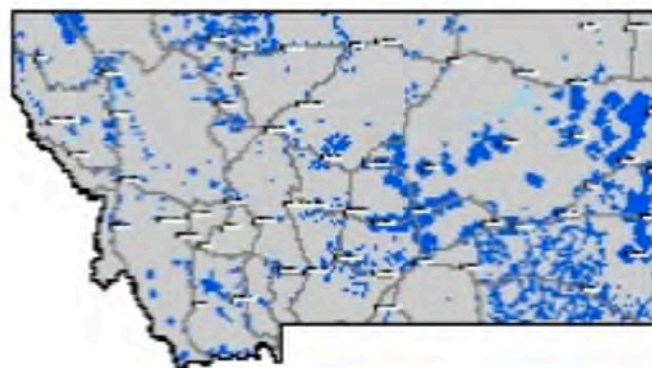
This map illustrates the availability of cellular wireless broadband internet service throughout Montana. Cellular wireless internet is broadcast from cellular towers to a cell phone or other mobile device without a physical connection. Please note that all cellular mobile wireless represents data only and not voice.



[Download Full Map](#) 

STDSLAvailability

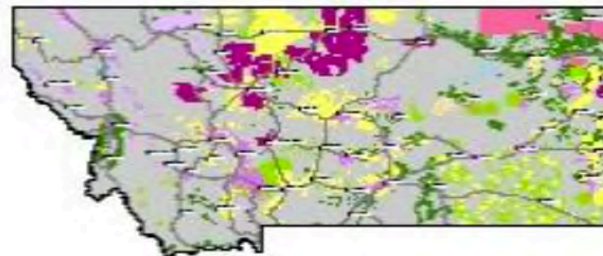
This map illustrates the availability of DSL broadband internet service throughout Montana. DSL or digital subscriber line is a group of technologies that transmit digital data over the wires of a local telephone network. The DSL coverage in this map includes both asymmetric (ADSL) and symmetric (SDSL) technologies.



[Download Full Map](#) 

STSPEEDMax

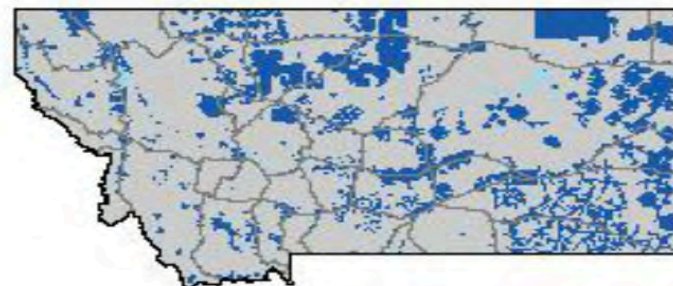
This map illustrates the maximum broadband internet speed in a given area for all broadband technologies (e.g., DSL, Cable Modem, Fiber, and Fixed Wireless) excluding mobile wireless. For example, if a given area has reported speeds of 1.5 mbps to 3 mbps, 3 mbps to 6 mbps, and 6 mbps to 10 mbps regardless of provider or type of technology, only the 6 mbps to 10 mbps would be displayed in the map.



[Download Full Map](#) 

STWired

This map illustrates the availability of wired broadband internet service. Wired internet is defined as having a physical connection to the end user and includes DSL, cable modem, and fiber technologies.



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STWireless

This map illustrates the availability of wireless broadband internet service. Wireless internet includes broadband broadcast from cellular towers or fixed wireless which connects two fixed locations (e.g., buildings) with a radio or other wireless link. Please note that all cellular mobile wireless represents data only and not voice.



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Audience Questions



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