

Per Pupil “Spending”

What are the measures, how do they differ, and what else matters?

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Is Utah still last in per-pupil spending?

“...when it came to "current spending" per pupil, Utah still ranked last in the nation, at \$6,206 per student in fiscal year 2012.”
(August 4, 2014)

<http://www.sltrib.com/58250849-68/per-spending-pupil-utah.html.csp>

Utah class of 2014 had top scores on ACT

“Utah had the highest score among the 12 states that gave the ACT test to almost every senior...” (August 20, 2014)

<http://www.sltrib.com/sltrib/news/58313224-78/utah-college-percent-act.html.csp>

“Spending” Per Pupil

An Input Measure

Evaluating Per Pupil Inputs

- **Revenue Per Pupil**: Includes money received by LEAs from state, federal, and local sources. Proceeds from bond sales, sale of assets, other non revenue receipts, transfers, and revenues from community areas are excluded.
- **Expenditures Per Pupil**: Expenditures by LEAs from revenue received. This includes salaries, benefits, professional and technical services, property services, other services, supplies, property, and other. Current Expenditures exclude capital outlay and interest on school debt.

Measures of REVENUE Per Pupil

State Revenue: Grants and other monies received by LEAs from state funds.

Utah ranks 46 out of 50.

Federal Revenue: Grants and other monies received by LEAs from federal funds.

Utah ranks 50 out of 50.

Local Revenue: Taxes levied or assessed by an LEA; revenues from a local government to the LEA; tuition received; transportation fees; earnings on investments; student activities, and other revenues (textbook sales, donations, property rentals).

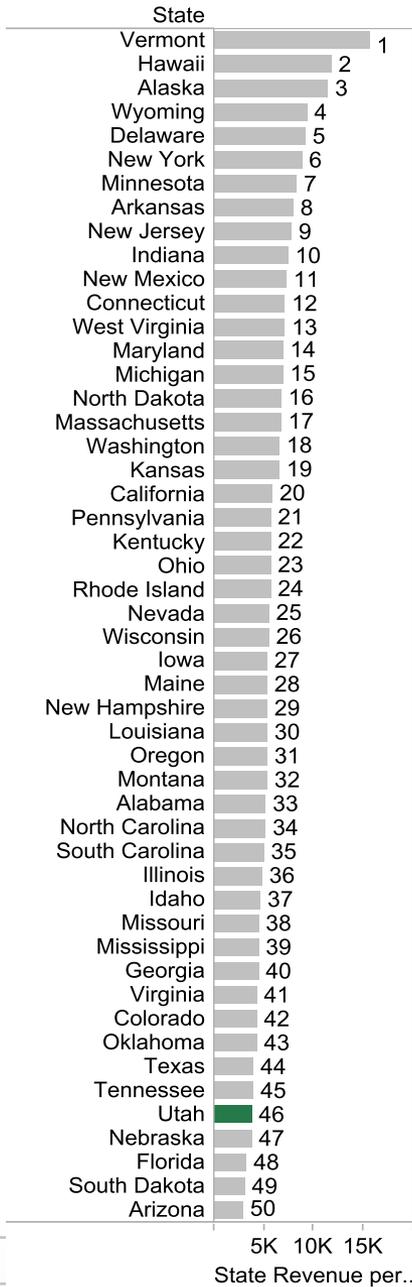
Utah ranks 43 out of 50.

All Revenue: Includes state, federal, and local revenue.

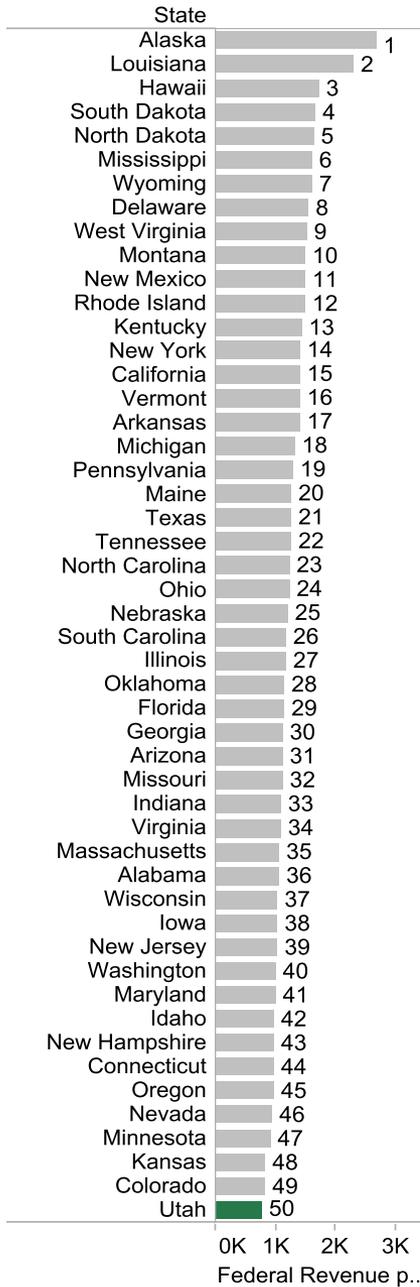
Utah ranks 49 out of 50.

NOTE: In all sources above, proceeds from bond sales, sale of assets, other non revenue receipts, transfers, and revenues from community areas are excluded.

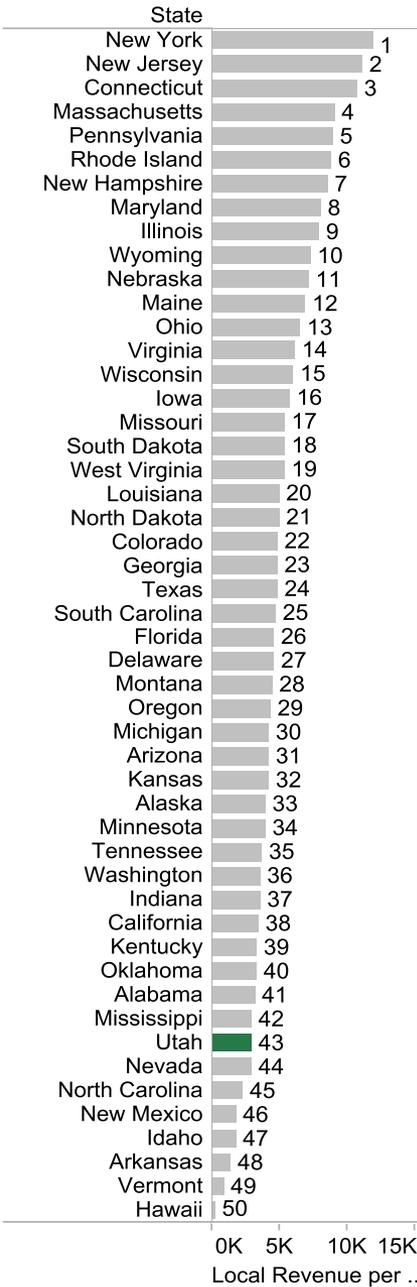
State Revenue per Student



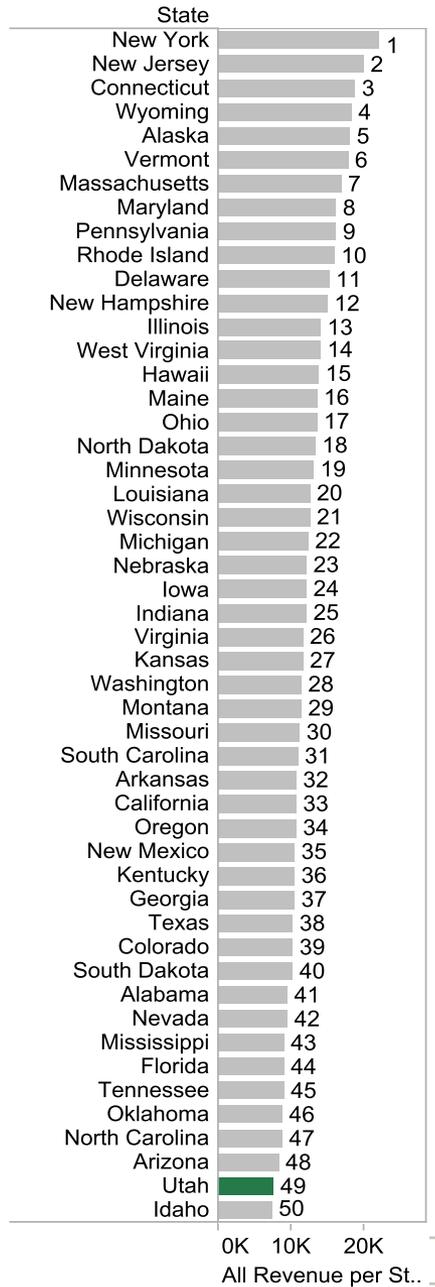
Federal Revenue per Student



Local Revenue per Student



All Sources per Student



All Sources per Student by Year, 2002-2012

State	Year																					
	2002		2003		2004		2005		2006		2007		2008		2009		2010		2011		2012	
New York	2		2		2		2		1		1		1		1		1		1		1	
New Jersey	1		1		1		1		2		2		3		3		4		6		1	
Connecticut	3		3		3		3		5		5		5		5		6		3		3	
Wyoming	6		7		8		6		7		3		2		2		2		5		4	
Alaska	8		9		9		9		12		10		4		6		5		4		5	
Vermont	5		5		5		5		6		6		6		4		3		2		6	
Massachus..	4		4		4		4		4		7		8		7		9		7		7	
Maryland	13		15		13		11		9		9		7		8		8		10		8	
Pennsylvania	12		10		10		10		10		11		10		11		10		9		9	
Rhode Island	9		8		6		7		8		8		9		9		7		8		10	
Delaware	10		12		11		13		11		12		13		14		14		12		11	
New Hamps..	20		18		16		15		14		14		14		13		11		11		12	
Illinois	19		20		20		20		22		21		20		15		15		13		13	
West Virginia	24		22		25		23		26		29		35		32		23		22		14	
Hawaii	7		6		7		8		3		4		11		10		13		16		15	
Maine	15		11		12		12		13		13		12		12		12		14		16	
Ohio	16		17		17		18		15		15		15		16		18		15		17	
North Dakota	35		31		29		25		27		26		27		23		17		21		18	
Minnesota	17		16		18		19		19		19		17		18		20		17		19	
Louisiana	41		40		40		30		25		28		26		27		24		23		20	
Wisconsin	14		14		14		16		16		18		18		17		19		19		21	
Michigan	11		13		15		17		17		16		16		25		21		18		22	
Nebraska	22		21		22		22		21		25		24		22		22		20		23	
Iowa	26		24		28		27		29		27		28		28		27		24		24	
Indiana	18		36		19		14		18		35		34		19		16		28		25	
Virginia	27		26		26		21		20		20		19		20		25		27		26	
Kansas	28		25		21		31		24		24		22		21		26		25		27	
Washington	29		28		33		35		36		32		33		26		29		30		28	
Montana	34		35		32		34		34		30		29		29		28		26		29	
Missouri	31		30		31		32		32		36		37		37		32		29		30	
South Carol..	30		32		35		33		31		33		32		34		33		33		31	
Arkansas	45		44		45		40		41		43		42		43		34		32		32	
California	25		19		24		24		23		17		21		24		37		34		33	
Oregon	23		27		23		26		30		31		30		31		30		35		34	
New Mexico	32		33		30		29		35		34		31		30		31		31		35	
Kentucky	37		37		39		39		37		41		39		41		39		40		36	
Georgia	21		23		27		28		28		23		25		33		35		36		37	
Texas	36		34		38		41		40		39		41		42		40		37		38	
Colorado	33		29		34		36		38		37		40		40		36		38		39	
South Dako..	40		38		37		38		39		40		43		38		38		39		40	
Alabama	42		43		44		43		44		38		36		44		41		43		41	
Nevada	43		42		41		42		42		42		38		36		42		44		42	
Mississippi	49		47		46		46		43		46		45		46		45		45		43	
Florida	38		39		36		37		33		22		23		39		43		42		44	
Tennessee	48		48		49		47		48		48		48		47		47		47		45	
Oklahoma	44		45		43		45		46		45		46		45		48		48		46	
North Caroli..	39		41		42		44		45		44		44		35		46		46		47	
Arizona	46		49		47		49		47		47		47		48		44		41		48	
Utah	50		50		50		50		50		50		50		50		50		49		49	
Idaho	47		46		48		48		49		49		49		49		49		50		50	

Source: Census Bureau, NCES, LFA

Measures of EXPENDITURE Per Pupil

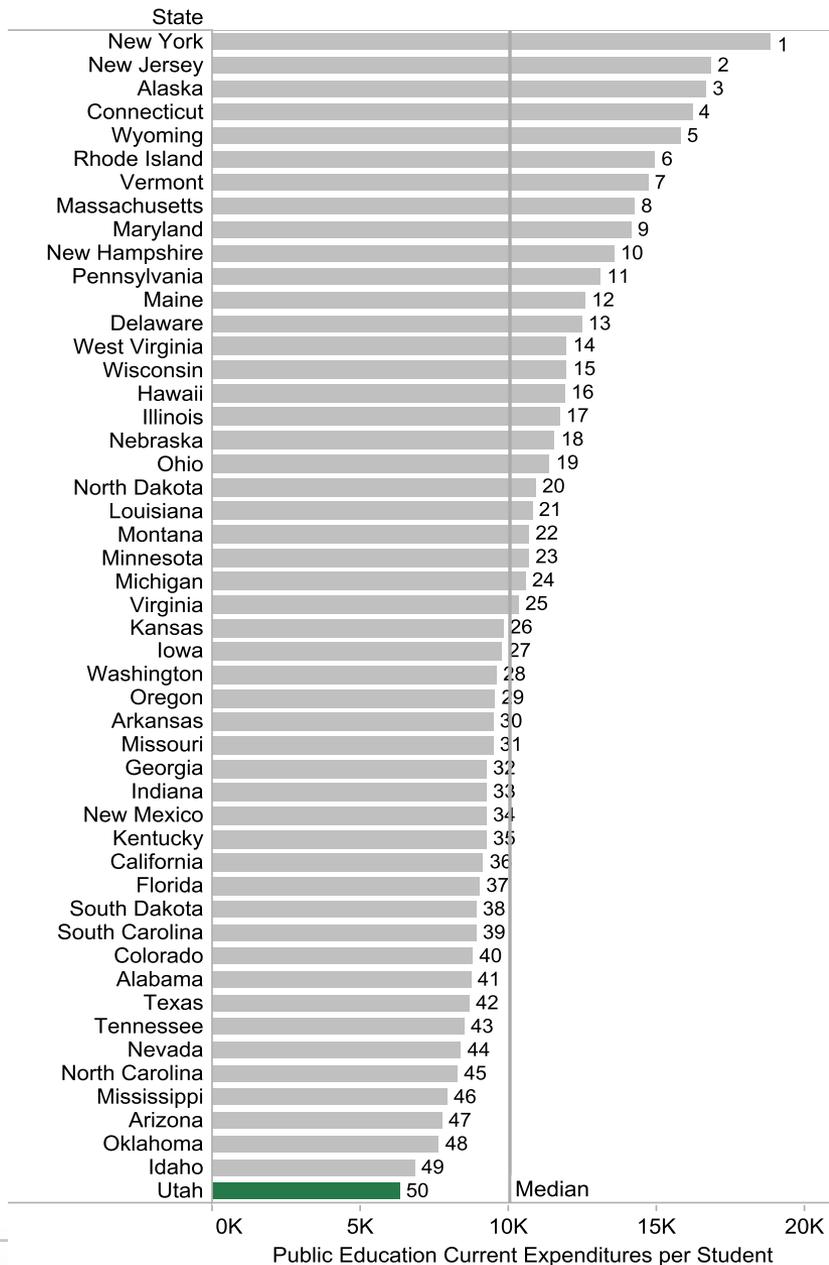
Current Expenditures: The expenditures for operating local public schools, excluding capital outlay and interest on school debt. These expenditures include such items as salaries for school personnel, benefits, student transportation, school books and materials, and energy costs. Expenditures for state administration are excluded.

Utah ranks 50 out of 50.

All Expenditures: The sum of all expenditures within the agency. This includes expenditures on salaries, employee benefits, purchased professional and technical services, purchased property services, other purchased services, supplies, property, and other.

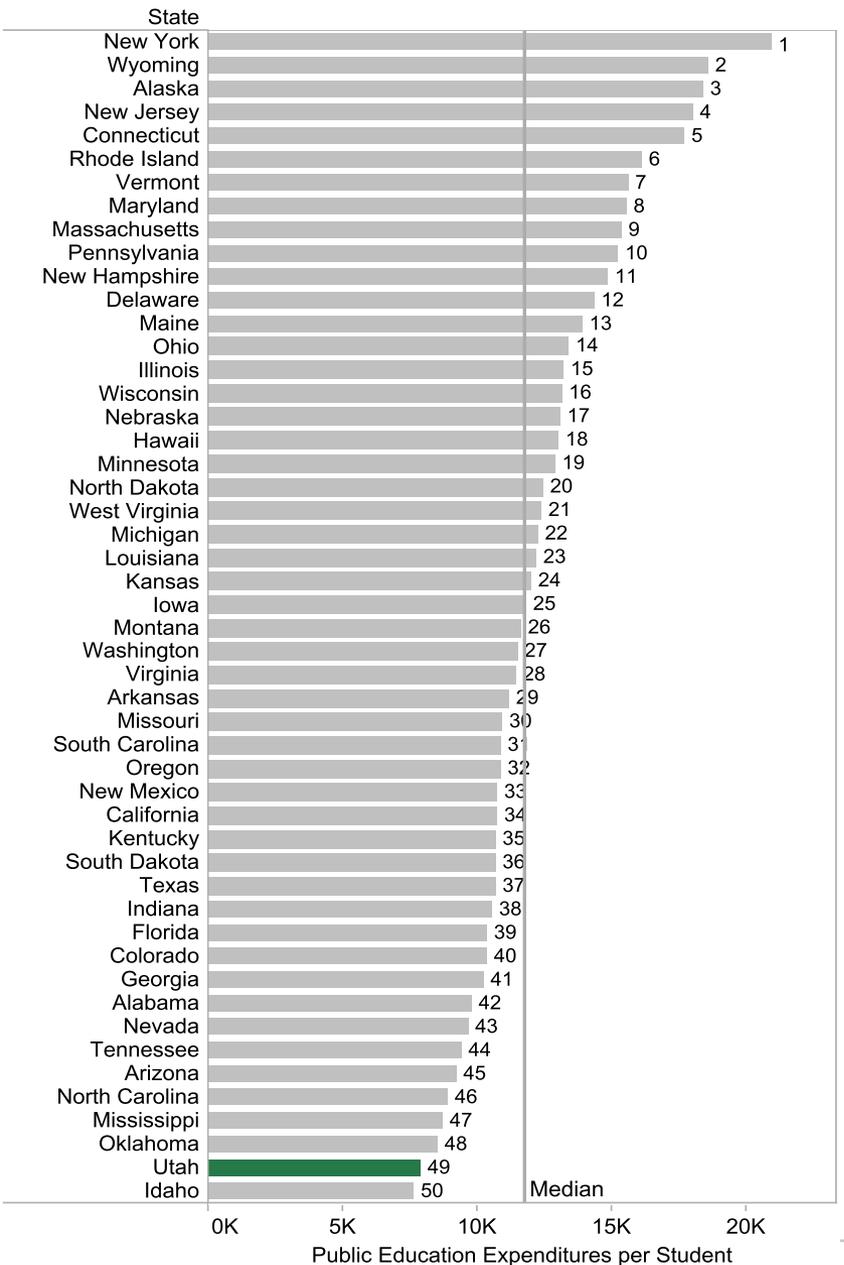
Utah ranks 49 out of 50.

Current Expenditures per Student



Public Education Current Expenditures per Student

Total Expenditures per Student



Public Education Expenditures per Student

Total Expenditures per Student, 2002-2012

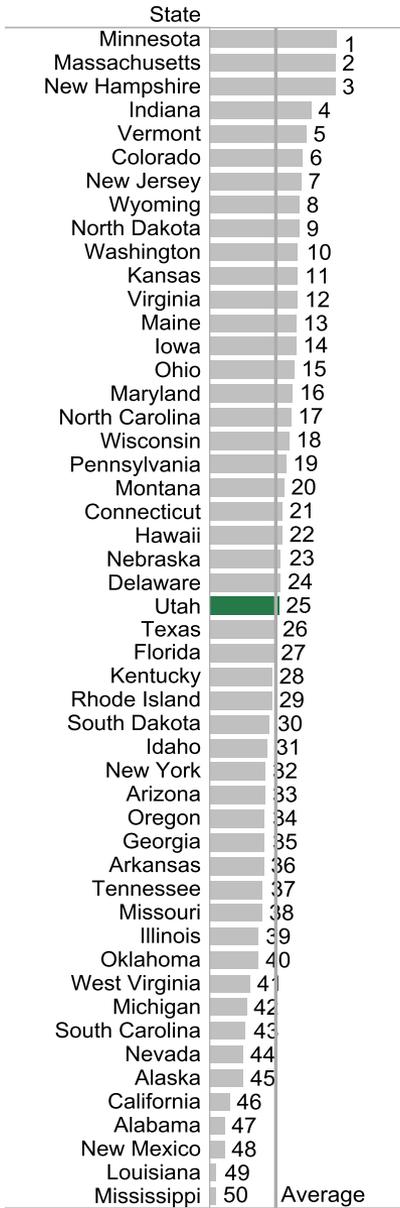
State	Year											
	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	
New York	1	1	1	2	1	3	1	1	3	1	1	
Wyoming	10	10	8	7	7	1	4	2	3	2	4	
Alaska	4	3	3	3	4	6	3	4	5	3	3	
New Jersey	2	2	2	1	2	2	2	3	2	4	2	
Connecticut	5	4	6	6	6	4	6	6	6	6	5	
Rhode Island	13	12	11	10	9	8	7	8	7	8	8	
Vermont	6	6	4	4	3	5	5	5	4	5	6	
Maryland	15	17	18	13	11	10	9	9	9	10	11	
Massachus..	3	5	5	5	5	7	8	7	8	7	7	
Pennsylvania	8	9	7	9	10	11	10	10	10	9	10	
New Hamps..	20	18	16	15	13	14	13	13	12	11	12	
Delaware	7	7	9	8	8	9	11	11	14	12	9	
Maine	14	11	10	11	12	12	12	12	11	13	14	
Ohio	17	15	13	14	15	17	17	17	15	14	13	
Illinois	16	16	17	20	22	22	21	16	13	15	16	
Wisconsin	11	14	14	16	17	20	20	20	17	19	24	
Nebraska	21	22	25	26	27	25	26	22	22	22	19	
Hawaii	35	27	22	24	19	13	14	15	20	20	18	
Minnesota	12	13	15	17	16	18	15	14	19	16	17	
North Dakota	38	34	27	25	26	30	33	31	16	17	15	
West Virginia	23	23	24	23	23	26	35	34	21	18	21	
Michigan	9	8	12	12	14	15	18	27	23	21	22	
Louisiana	41	40	41	32	41	39	29	28	27	23	20	
Kansas	34	36	35	38	32	31	34	18	18	26	28	
Iowa	25	28	26	29	28	28	31	29	24	25	23	
Montana	36	35	36	39	36	34	32	32	28	28	29	
Washington	30	29	31	31	33	29	28	24	32	29	27	
Virginia	24	24	23	22	18	16	16	19	25	27	25	
Arkansas	46	44	42	42	40	41	42	41	29	24	26	
Missouri	31	32	34	37	39	36	37	33	34	34	33	
South Carol..	27	31	32	27	24	23	25	25	30	32	31	
Oregon	19	20	19	19	31	33	24	21	26	30	30	
New Mexico	32	33	30	30	35	35	30	23	31	31	34	
California	22	21	21	21	20	19	22	26	33	35	36	
Kentucky	42	41	38	34	37	42	40	43	38	36	35	
South Dako..	37	37	39	40	43	43	44	42	42	37	39	
Texas	28	30	33	36	38	38	39	35	35	33	38	
Indiana	18	19	20	18	21	24	41	38	36	38	32	
Florida	39	39	37	35	25	21	19	36	41	41	43	
Colorado	29	26	28	28	29	37	36	40	39	39	40	
Georgia	26	25	29	33	30	27	23	30	37	40	37	
Alabama	44	43	43	43	42	40	38	39	40	42	41	
Nevada	33	38	40	41	34	32	27	37	43	43	42	
Tennessee	45	45	45	46	47	47	48	48	47	46	44	
Arizona	48	49	49	49	48	48	46	47	48	45	47	
North Caroli..	40	42	44	44	45	44	43	44	44	44	45	
Mississippi	49	48	46	47	44	46	45	45	45	47	46	
Oklahoma	43	46	47	45	46	45	47	46	46	48	48	
Utah	50	50	50	50	50	50	49	49	50	49	49	
Idaho	47	47	48	48	49	49	50	50	49	50	50	

Source: NCES, Census Bureau, LFA

Student Achievement

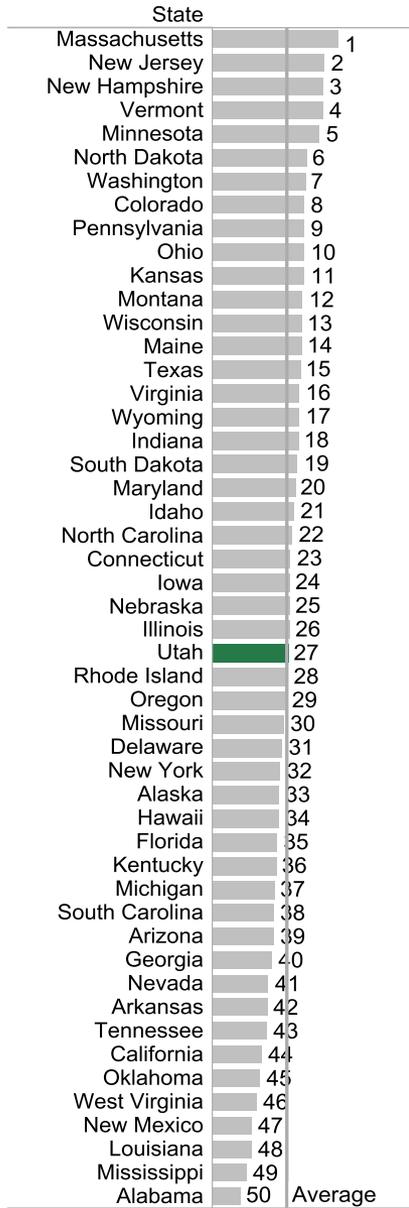
An Outcome Measure

NAEP 4th Grade Math



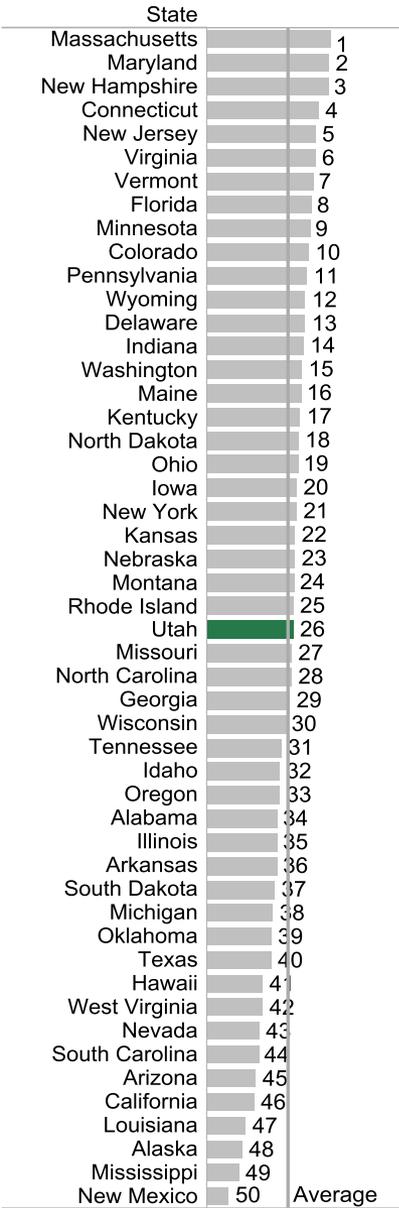
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NAEP Math 4th Gr..

NAEP 8th Grade Math



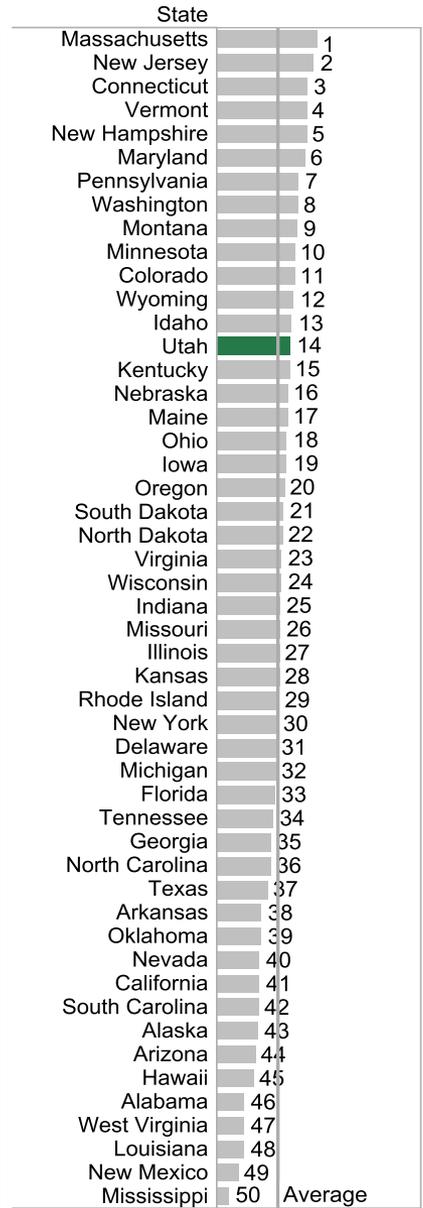
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NAEP Math 8th Gr..

NAEP 4th Grade Reading

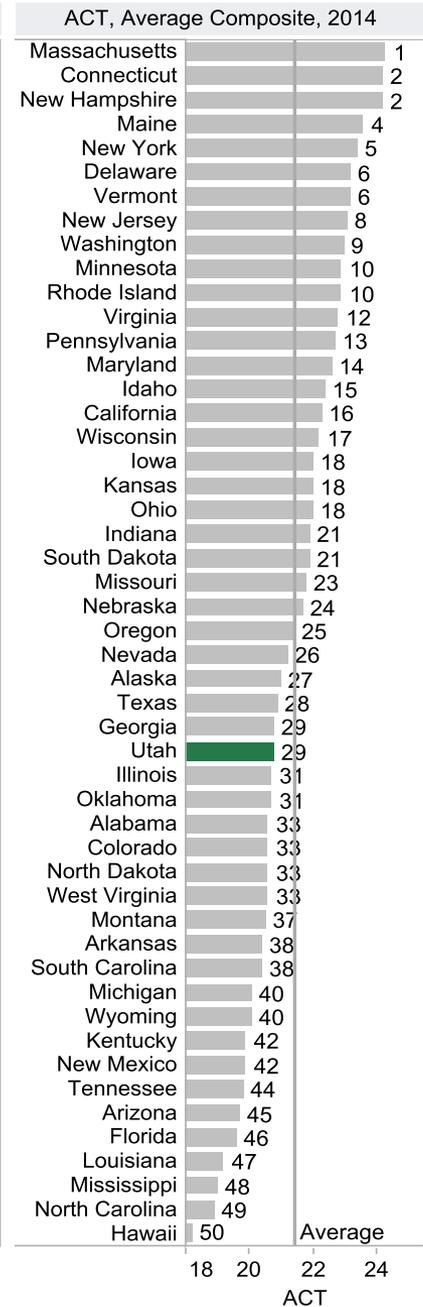
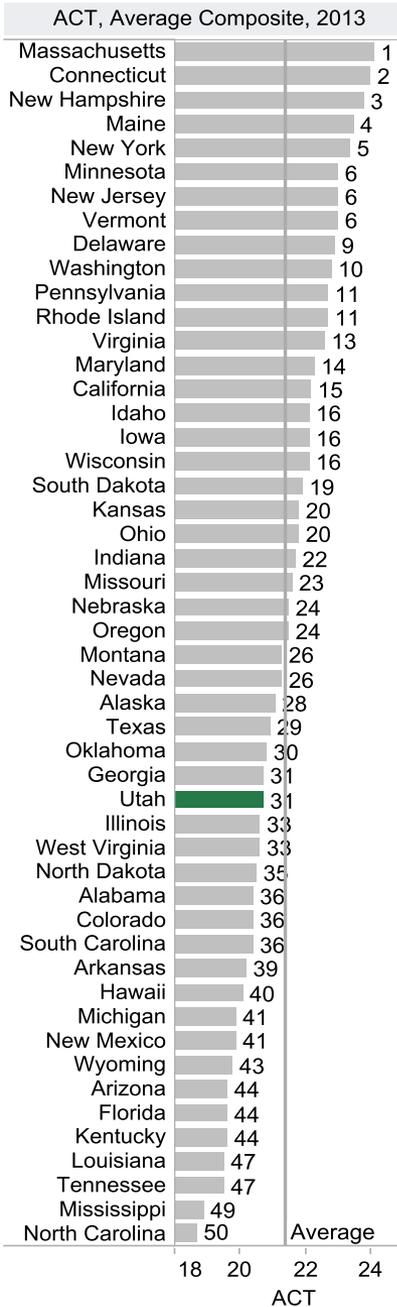
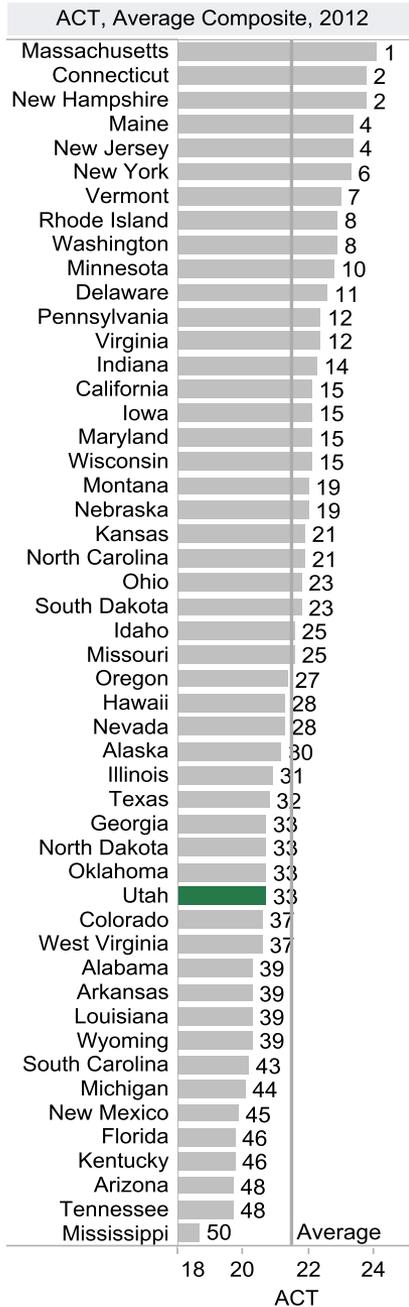
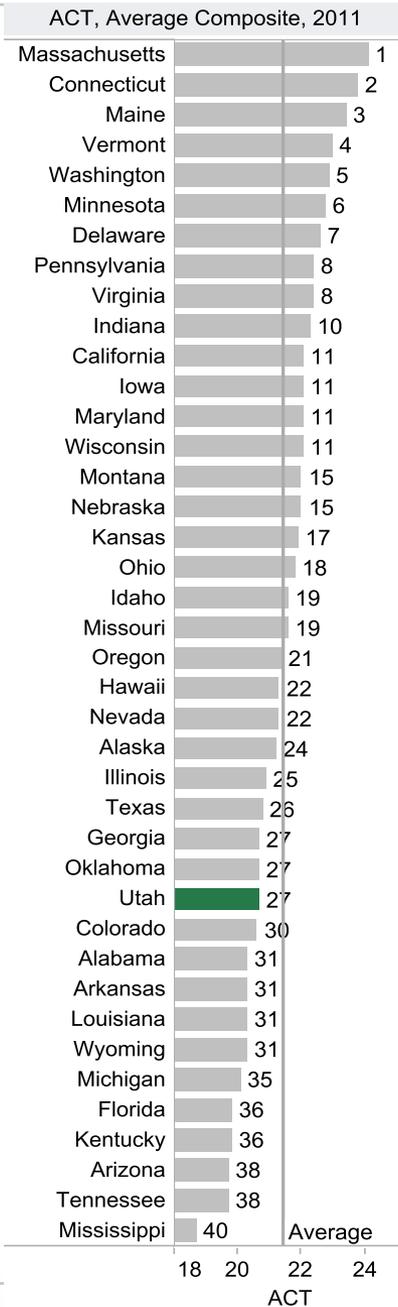


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NAEP Reading 4th ..

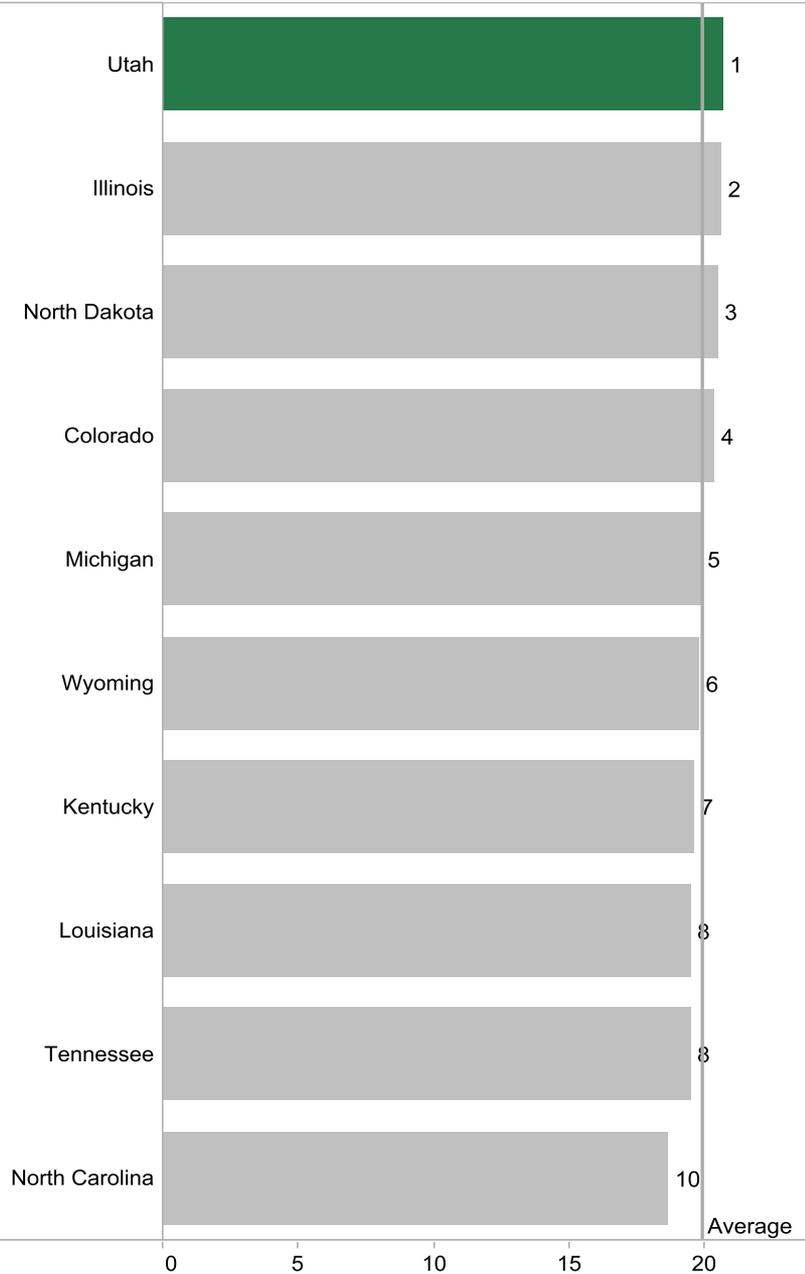
NAEP 8th Grade Reading



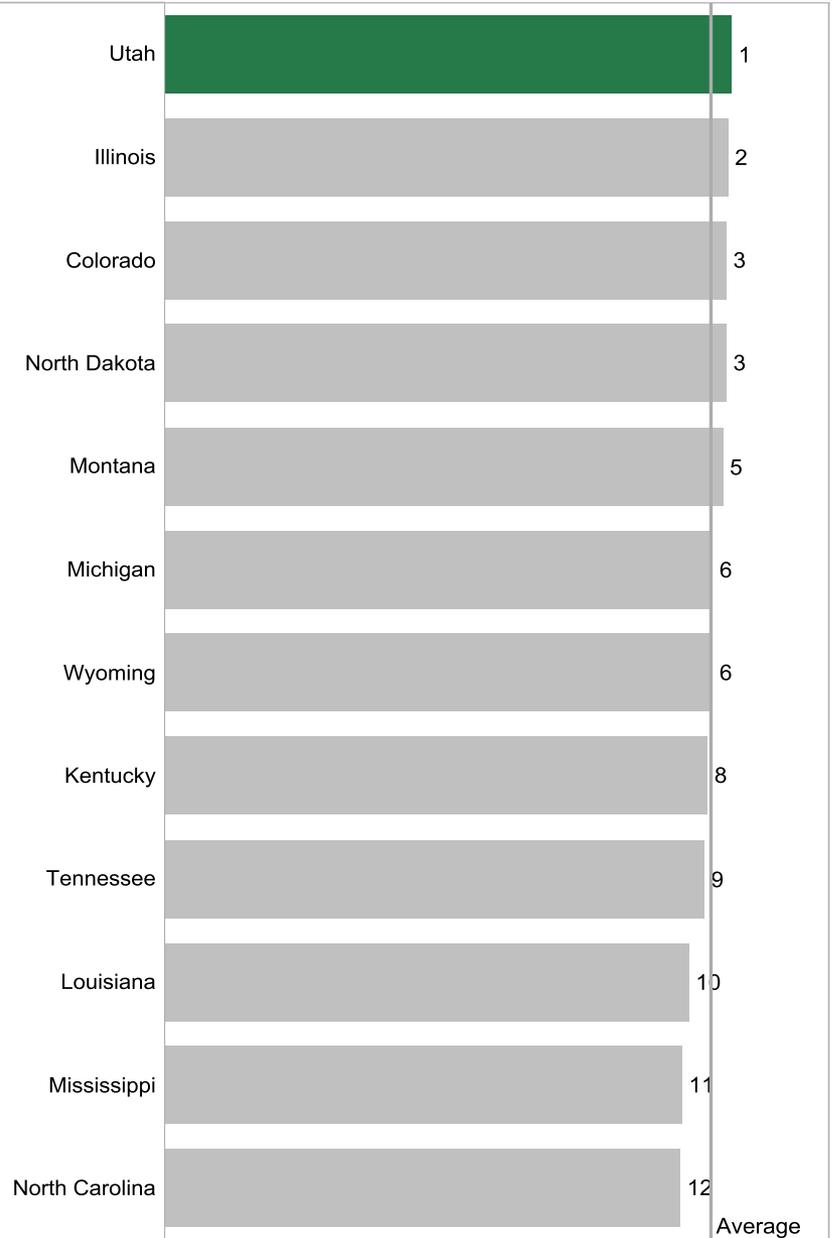
260 280 300
NAEP Reading 8th ..



ACT Required States, 2013



ACT Required States, 2014



What Gives?

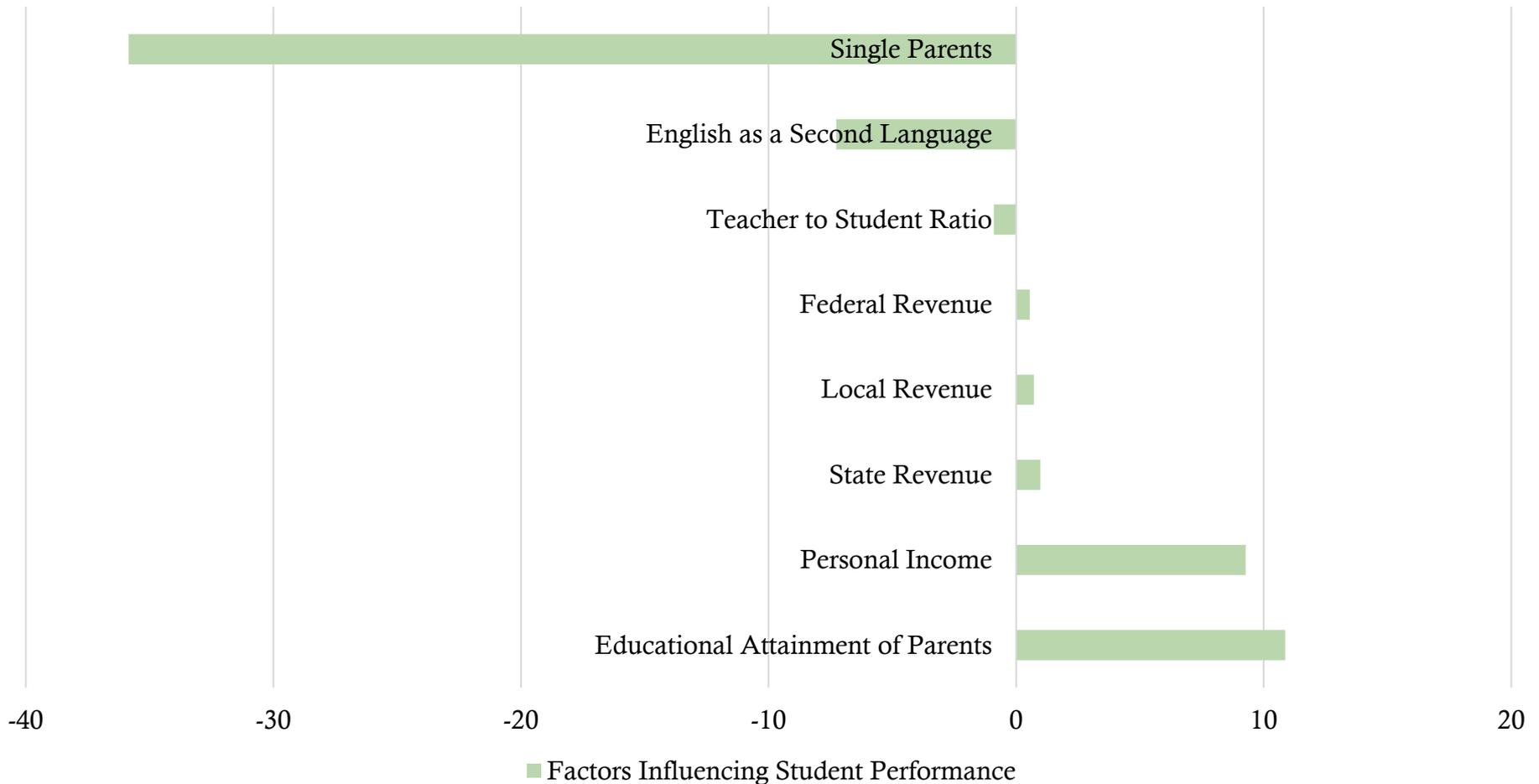
Intervening Variables

What Inputs Impact Achievement?

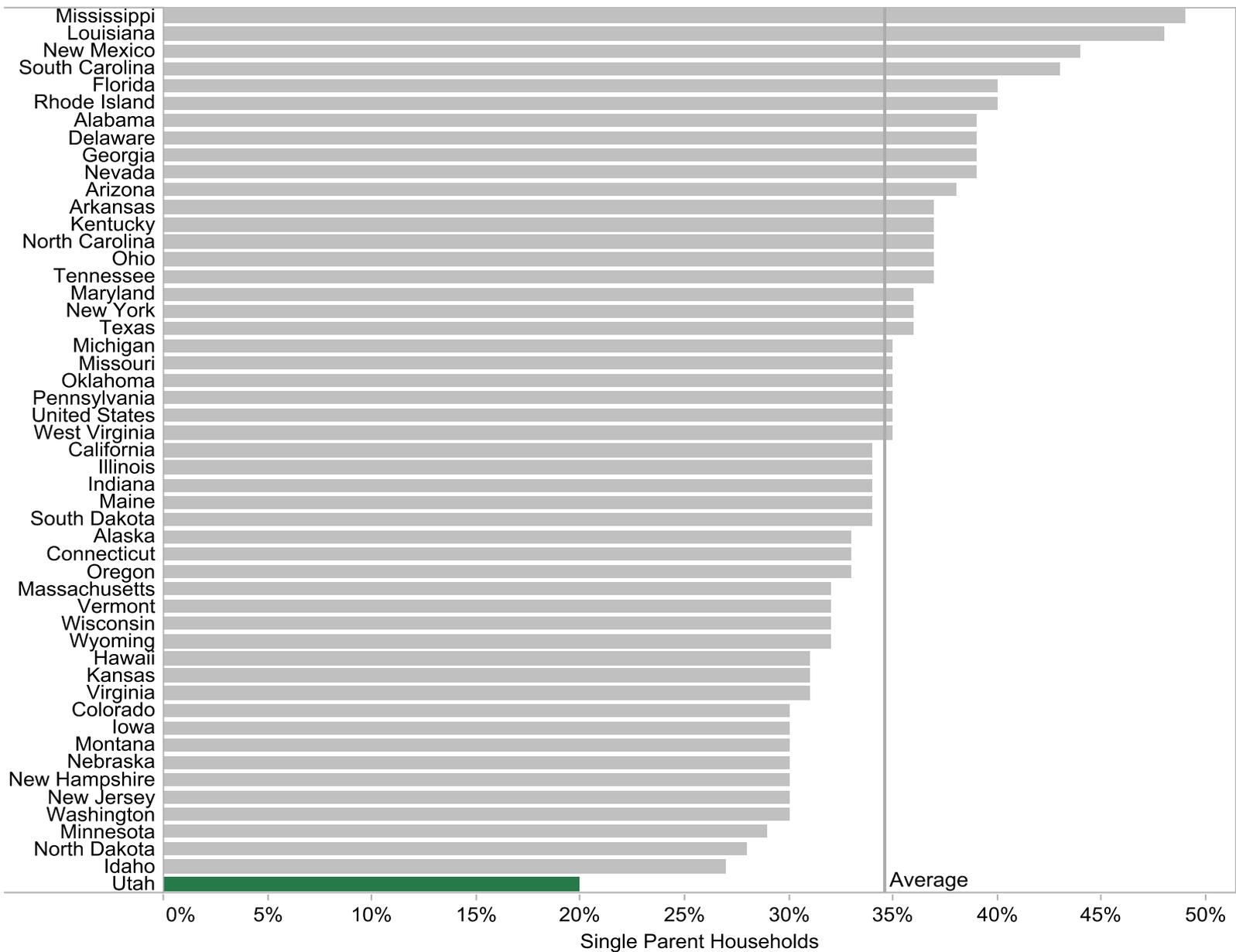
- Spending is one of many inputs to achievement. Others include (but are not limited to):
 - Parental Involvement (proxy: Single Parent Households)
 - Student Comprehension (proxy: English Language Learners)
 - Educator Engagement (proxy: Teacher/Student Ratio)
 - Public Resources (proxy: Federal, State, Local Revenue)
 - Private Resources (proxy: Personal Income)
 - Student Motivation (proxy: Educational Attainment of Parents)

Random Effects Panel Regression Results

Factors Influencing Student Performance

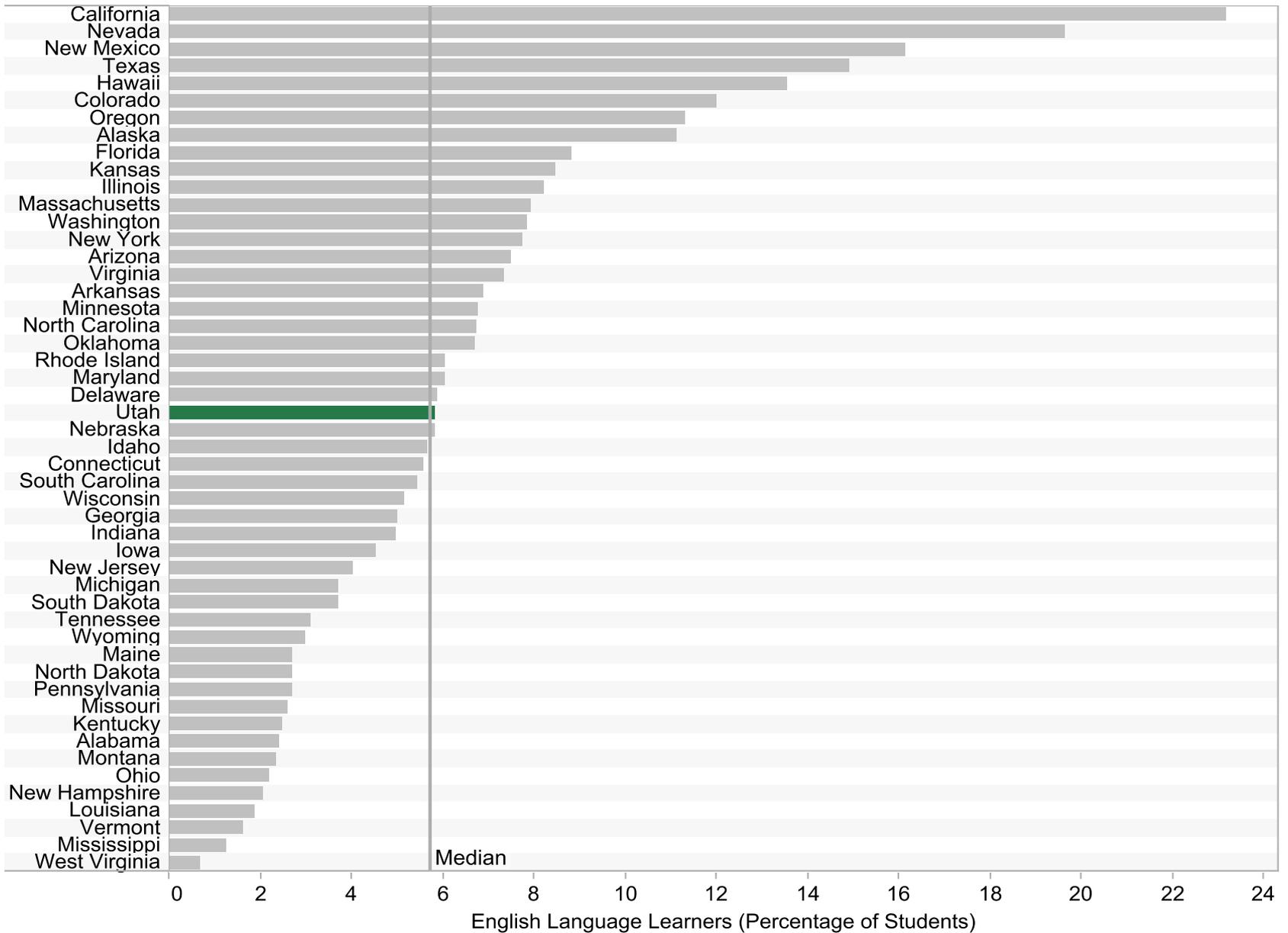


Single Parent Households, 2012



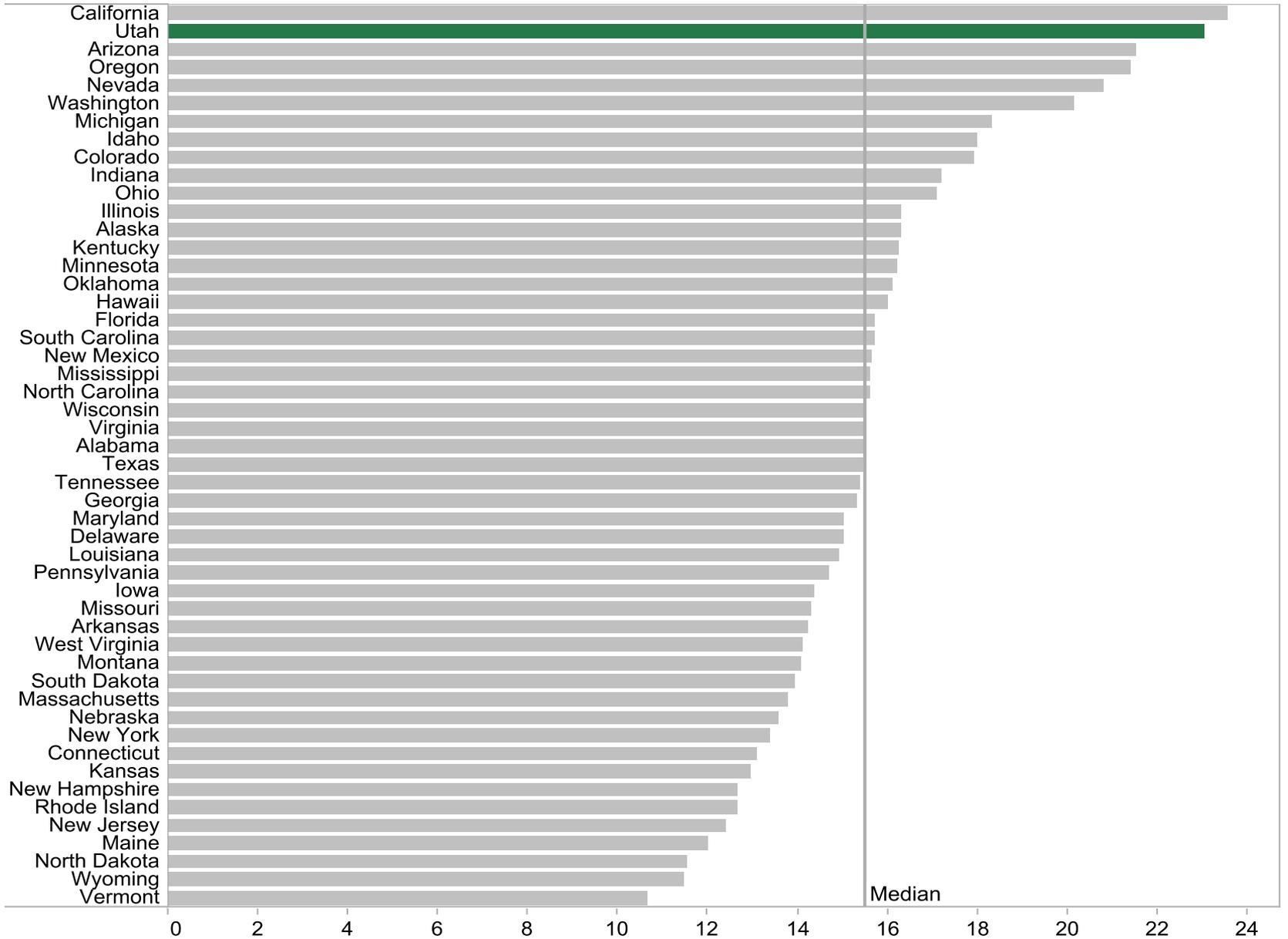
Sources: Census Bureau, American Community Survey, Annie E. Casey Foundation

English Language Learners as Percentage of Students, 2012



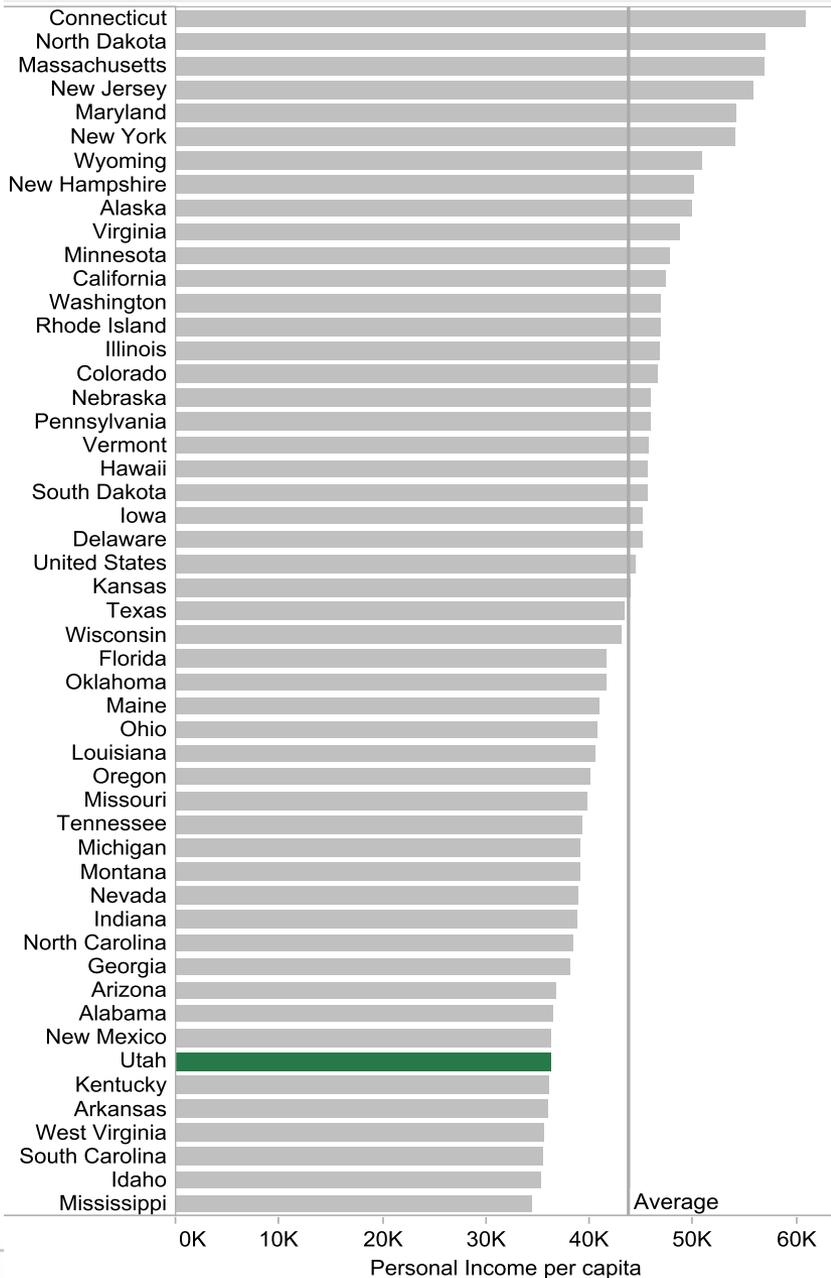
Sources: NCES

Teacher to Student Ratio, 2011

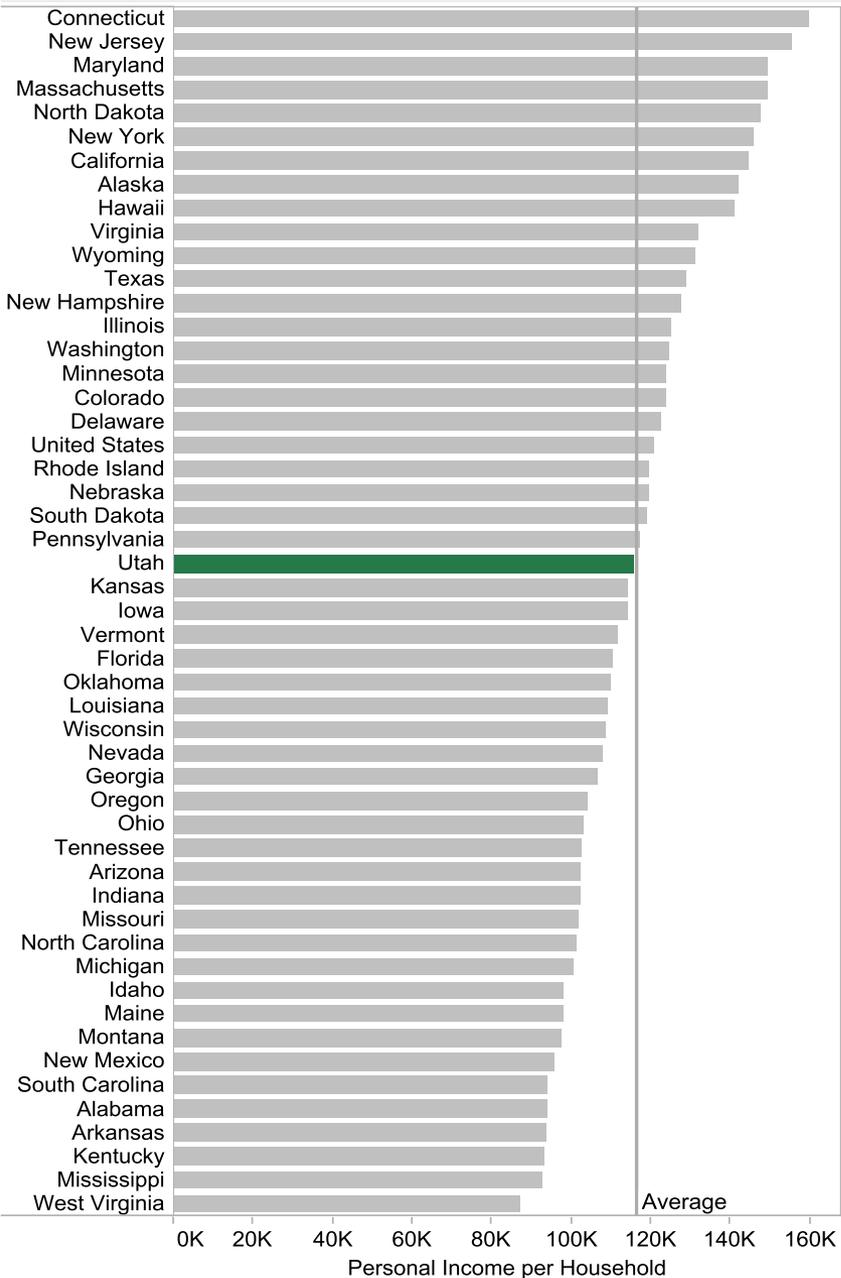


Sources: Moody's, NCES

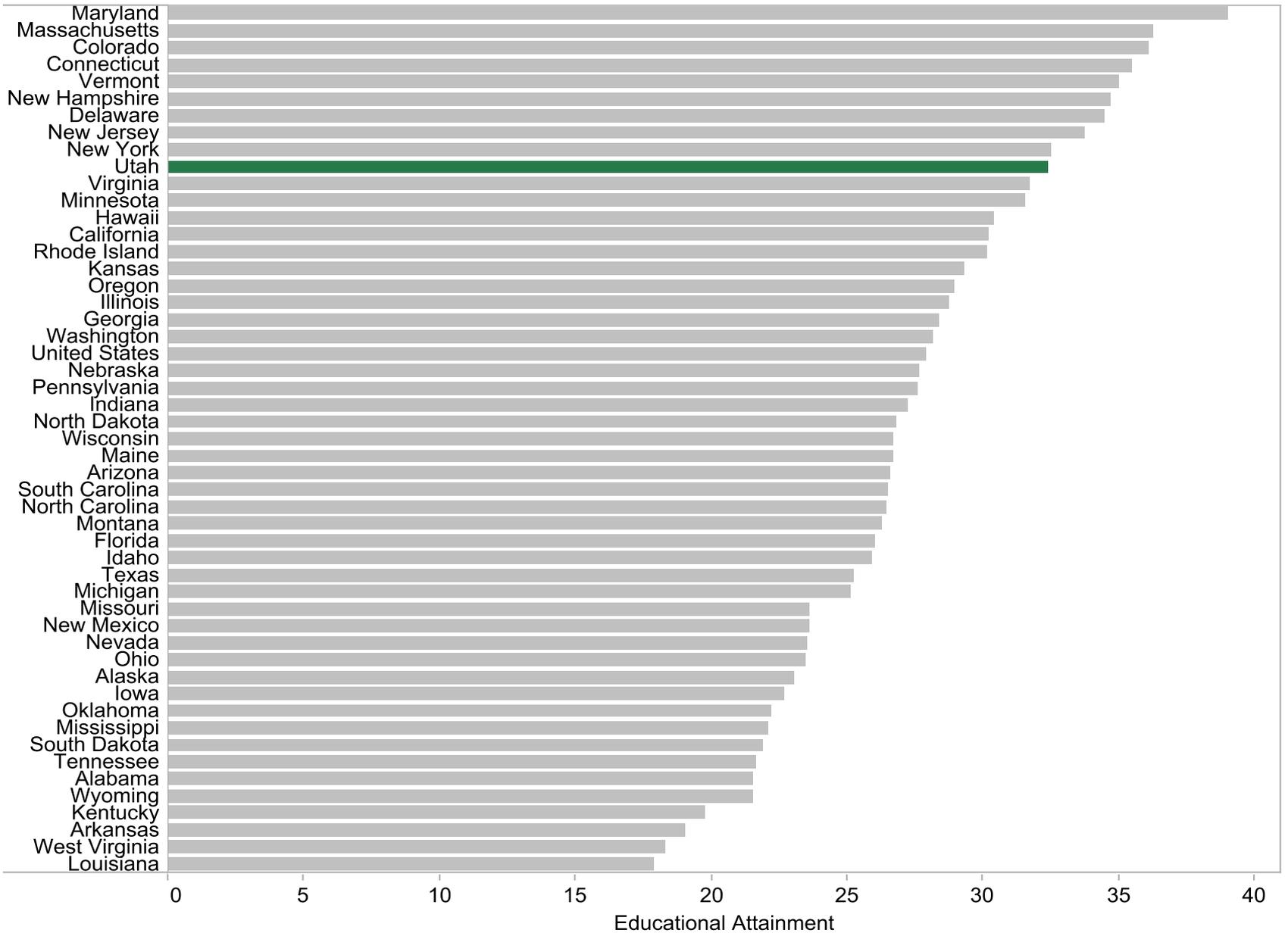
Personal Income per Capita, 2013



Personal Income per Household, 2013



Educational Attainment



Sources: Moody's, CPS, ACS, NCES

“Take Aways”

1. There are many measures of resources per pupil.
2. All are input measures and are reported on a two year lag.
3. Utah is at or near the bottom in all of them and that hasn't changed in 2012 data.
4. Education achievement is a better indicator of success.
5. Other factors that influence achievement work in Utah's favor (p.s. these factors are changing).
6. Policymakers should consider all inputs collectively and target resources to highest impact programs/projects.