

Appendix A

Dr. R.C. Wood's slide show/ text of full final report

Financing Missouri's Public Elementary & Secondary Schools: Preliminary Report

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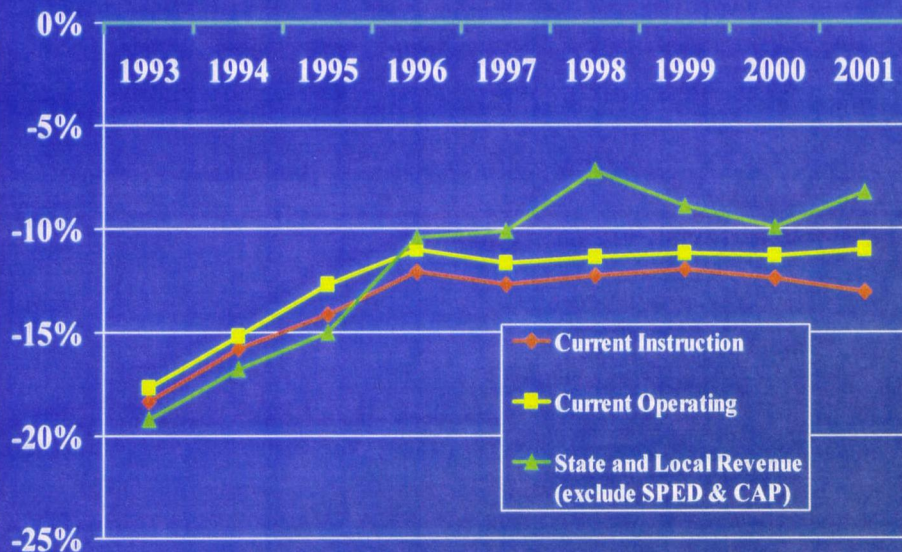
Dr. Bruce Baker, University of Kansas

Steven Smith, National Conference of State Legislatures

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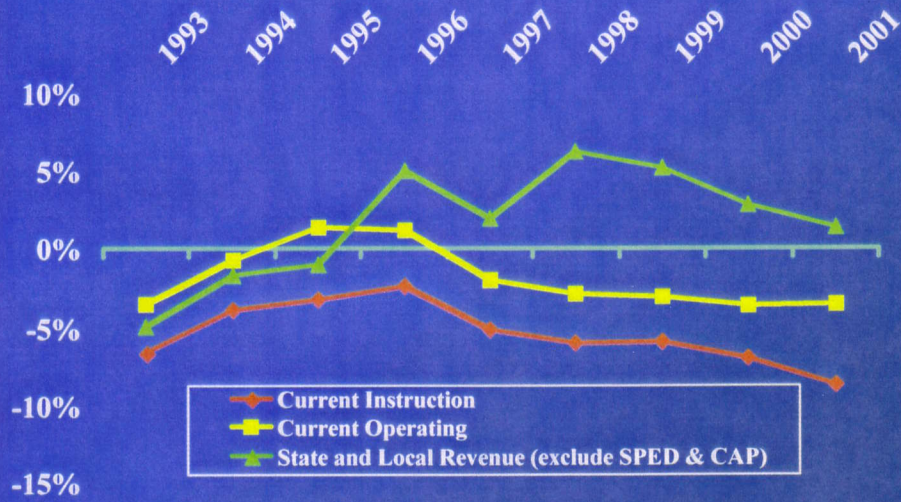
Missouri v. U.S. Growth (All K-12 Districts)

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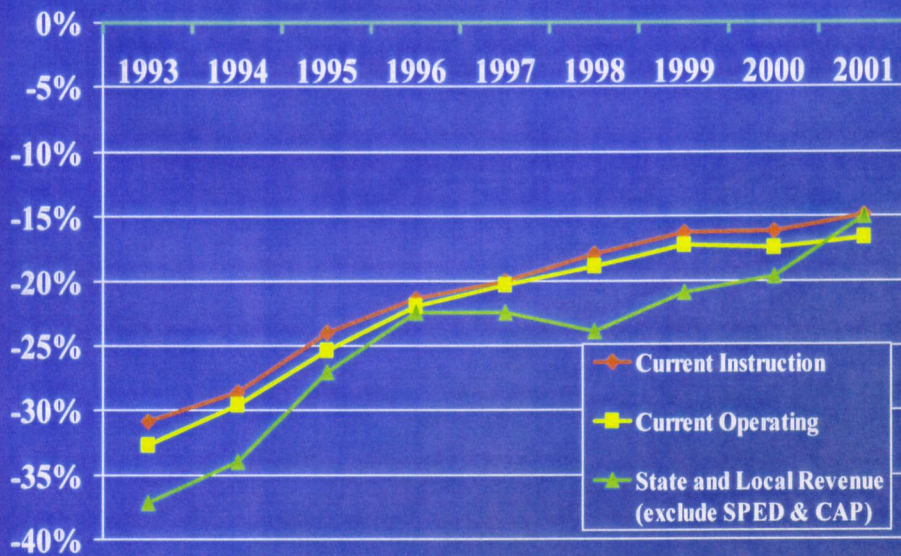
Missouri v. U.S. Growth (Large K-12 Districts)

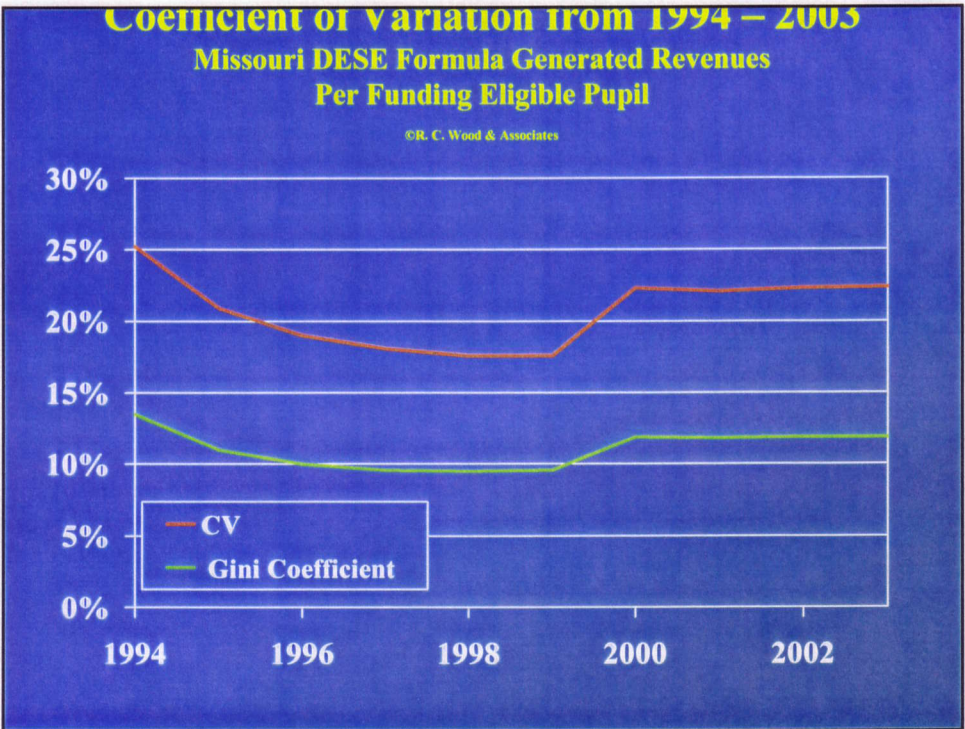
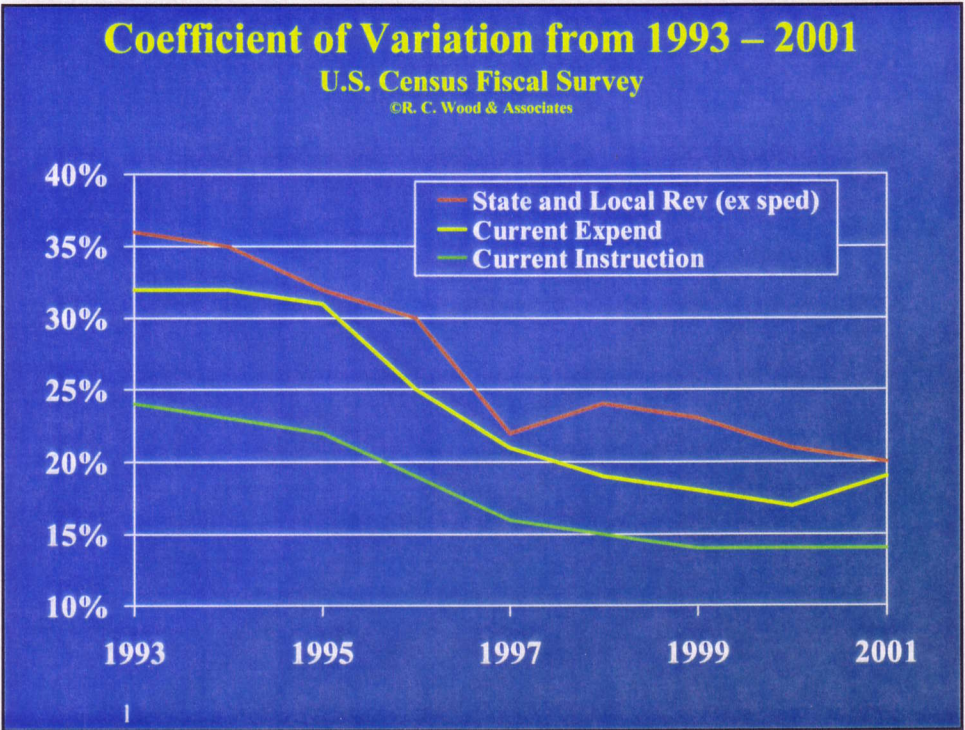
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Missouri v. U.S. Growth (Small K-12 Districts)

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Summary of Trends & Issues

- Significant improvements to equity through 1990s with some backsliding from 1999 – 2003
- Improvements to fiscal neutrality in the 1990s with some recent backsliding
- Current Major GAPS in Funding
 - Small to midsize districts, especially those with higher poverty and lower taxable wealth
 - Consists of small, poor rural and poor urban fringe

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Long Term Goal: Basic Concept

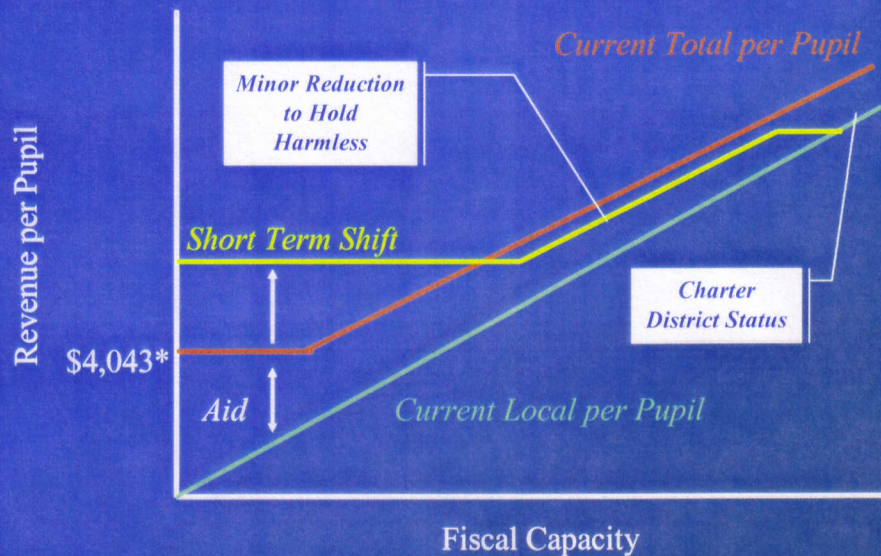
From Tax Rate Driven to Cost/Need/Student Driven Aid

- Tier I: Cost adjusted general education aid per pupil
 - Basic (Median) Cost = Cost of achieving desired performance outcomes in district of average characteristics
 - Cost adjustments (to general aid formula)
 - Student Needs
 - Economic Disadvantage
 - Language Proficiency Status
 - High Incidence/Low Severity Disability
 - District Needs
 - Economies of scale & sparsity
 - Geographic variations in competitive market prices (teacher wages etc.)
- Tier II: Local option to supplement with matching aid from state (adjusted for capacity & cost)

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Short Term Goal: Raising the Floor

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*elimination of proration factor = $(2.75/100 \times 147,022)$

Option I: Hold Costs Constant at 2002 – 03 levels (simulating actual current year '03 – '04)

- Budget Constraint = \$ 1.966 billion
 - Total State Aid 2002 – 2003
 - Exclusions: Charter districts, federal lands, St. Louis special district
- Major Parameters
 - GTB = 151,200
 - Base Levy = 2.75
 - Poverty Weight = 50%
 - Elimination of Proration factor
- Other Changes
 - Revert to 1.0 x Summer ADA (net gain = \$22 million)
 - Prior year actual assessed value for local effort (net gain = \$28 million)
 - Actual rather than equalized levy (net gain = \$18 million)
 - Line 3,4,8,9 of deductions collected to state (net gain = \$129 million)

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Option I: Hold Costs Constant at 2002 – 03 levels (simulating current year 2003 – 04)

- Other changes (cont'd)
 - Hold Harmless set at retaining 95 % of 2002 – 2003 state aid
 - Net gain = \$ 53 million.
 - Charter district status eligibility
 - Districts with <7.5 % of budget from state general aid & for which the cost of making up that difference is <20cents of additional local levy
 - Net gain = \$8.75 million

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Costs of Option I

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Revenue Generated by Deductions	
Line 3: Intangible	\$ 38.17
Line 4: RR and Util	\$ 112.84
Line 5:	\$ -
Line 6: Impact Aid	\$ -
Line 7: Prop C	\$ -
Line 8: Fair Share	\$ 22.43
Line 9: Textbook	\$ 70.09
Total Revenue from Recollected Deductions	\$ 243.53
Total State Cost with HH (retain deduct)	\$ 2,101
Total State Cost with HH (distrib deduct)	\$ 2,220
State Cost Less Deduction Redistribution	\$ 1,976
Total State Cost Less Charter	\$ 1,967
Total State Aid 2002 - 03	\$ 1,966
Dollar Change from 2002 - 03	\$ 0.88
Percent Change	0.04%

Related Costs of Option 1

Related Costs of Hold Harmless 95 % of 02-03 Data

Number of HH districts (redistribute deducts) = #151

Costs of HH harmless (redistribute deducts) = \$ 414 million

Urban Safety Valve Costs = \$ 13.36 million
(costs of protecting St. Louis & KC against loss)
(not included)

Local Taxes Required to Offset HH Reduction
Max Rate to Offset \$ 0.99
Mean Rate to Offset \$ 0.09

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Equity Changes (option 1)

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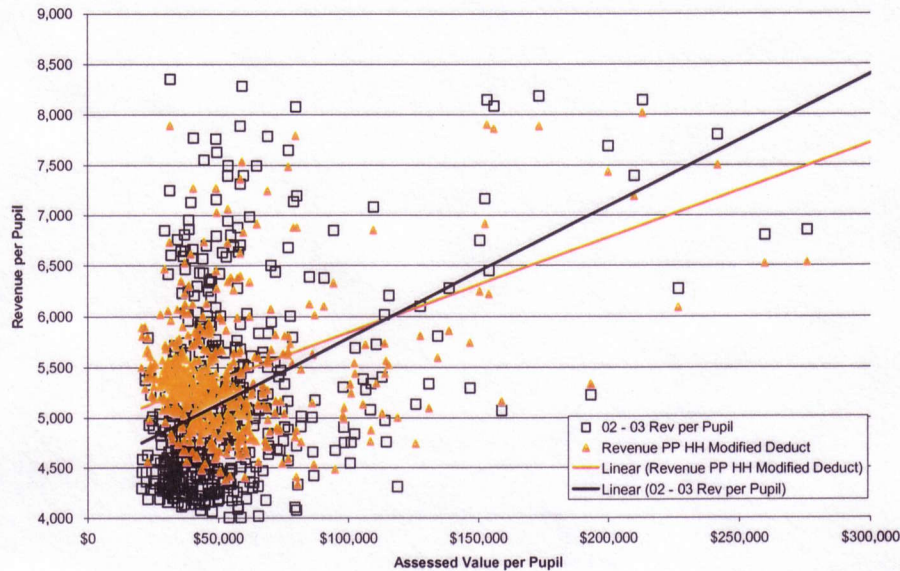
Equity Output

	2002 - 03		New Formula	
Mean	\$	5,570	\$	5,648
Stdev	\$	1,181	\$	984
CV		21%		17%
95%ile		\$8,082	\$	7,789
5%ile		\$4,178	\$	4,625
FRR		0.93		0.68
McLoone		0.88		0.93
GINI		0.12		0.09

Option I: Revenue Changes

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Changes in Aid by Wealth



Base Case II: At 2002 - 03 Formula with Full 1.0 Proration on 1a & 1b (cost of \$2.219 billion)

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Major Formula Factors

GTB	\$ 147,022
Tier 1 Base Rate	\$ 2.75
Line 14b GTB	\$ 119,138
Poverty Weight	20%
Line 14b Poverty Weight	30%
Proration (1a)	1.00
Proration (1b)	1.00
Matching Aid Levy Cap	\$ 4.95

Summer Enrollment

Percent to Reduce	0
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Local Effort Calculation Factors

Assessed Value for Loc. Eff.	1
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(1 = current law, 2 = prior year)

Actual or Equalized Levy	1
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(1 = equalized, 2 = actual)

Deduction Lines

	On/Off	Total
Line 3: Intangible	1	\$ 38
Line 4: RR and Util	1	\$ 113
Line 5:	NA	\$ 2
Line 6: Impact Aid	NA	\$ -
Line 7: Prop C	NA	\$ 326
Line 8: Fair Share	1	\$ 22
Line 9: Textbook	1	\$ 70

Hold Harmless

Percent of 02 - 03 Aid to Retain	100
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Charter Status

Percent State Aid Limit to Qualify	0.0%	0
Tax Levy Limit to Offset to Quality	\$ -	0
Both		0
Yield	\$ -	

Revenue Generated by Deductions

Line 3: Intangible	\$ -
Line 4: RR and Util	\$ -
Line 5:	\$ -
Line 6: Impact Aid	\$ -
Line 7: Prop C	\$ -
Line 8: Fair Share	\$ -
Line 9: Textbook	\$ -
Total Revenue from Recollected Deductions	\$ -

Total State Cost with HH (retain deduct)	\$ 2,219
Total State Cost with HH (distrib deduct)	\$ 2,219
State Cost Less Deduction Redistribution	\$ 2,219
Total State Cost Less Charter	\$ 2,219

Total State Aid 2002 - 03	\$ 1,966
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Dollar Change from 2002 - 03	\$ 252.51
Percent Change	12.84%

Hold Harmless Data (X% of 2002 - 03 State Rev)

Number HH (Retain Deducts)	62
Cost of Hold Harmless (Retain Deducts)	\$ 49
Number HH (Redistribute Deducts)	62
Cost of Hold Harmless (Redistribute Deducts)	\$ 49

Urban Safety Valve Costs

Cost of Protecting KC & St. Louis Against Loss	\$ -
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Local Taxes Required to Offset HH Reduction

Max Rate to Offset	\$ -
Mean Rate to Offset	\$ -
Median Rate to Offset	\$ -
Maximum State Cost of Matching Increases	\$ -

Option II: Proposal

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Major Formula Factors

GTB	\$ 168,000
Tier 1 Base Rate	\$ 2.75
Line 14b GTB	
Poverty Weight	50%
Line 14b Poverty Weight	
Proration (1a)	1.00
Proration (1b)	
Matching Aid Levy Cap	

Summer Enrollment

Percent to Reduce	50
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Local Effort Calculation Factors

Assessed Value for Loc. Eff.	2
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(1 = current law, 2 = prior year)

Actual or Equalized Levy	2
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(1 = equalized, 2 = actual)

Deduction Lines

	On/Off	Total
Line 3: Intangible	0	\$ 38
Line 4: RR and Util	0	\$ 113
Line 5:	NA	\$ 2
Line 6: Impact Aid	NA	\$ -
Line 7: Prop C	NA	\$ 326
Line 8: Fair Share	0	\$ 22
Line 9: Textbook	0	\$ 70

Hold Harmless

Percent of 02 - 03 Aid to Retain	95
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Charter Status

Percent State Aid Limit to Qualify	7.5%	Number	8
Tax Levy Limit to Offset to Quality	0.20		7
Both			7
Yield			\$ 8.75

Revenue Generated by Deductions

Line 3: Intangible	\$ 38.17
Line 4: RR and Util	\$ 112.84
Line 5:	\$ -
Line 6: Impact Aid	\$ -
Line 7: Prop C	\$ -
Line 8: Fair Share	\$ 22.43
Line 9: Textbook	\$ 70.09

Total Revenue from Recollected Deductions \$ 243.53

Total State Cost with HH (retain deduct) \$ 2,323

Total State Cost with HH (distrib deduct) \$ 2,472

State Cost Less Deduction Redistribution \$ 2,228

Total State Cost Less Charter \$ 2,219

Total State Aid 2002 - 03 \$ 1,966

Dollar Change from 2002 - 03 \$ 252.86

Percent Change 12.86%

Hold Harmless Data (X% of 2002 - 03 State Rev)

Number HH (Retain Deducts)	132
Cost of Hold Harmless (Retain Deducts)	\$ 314
Number HH (Redistribute Deducts)	87
Cost of Hold Harmless (Redistribute Deducts)	\$ 239

Urban Safety Valve Costs

Cost of Protecting KC & St. Louis Against Loss	\$ 13.36
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Local Taxes Required to Offset HH Reduction

Max Rate to Offset	\$ 0.99
Mean Rate to Offset	\$ 0.05
Median Rate to Offset	\$ -
Maximum State Cost of Matching Increases	\$ -

Option II: Equity Outcomes

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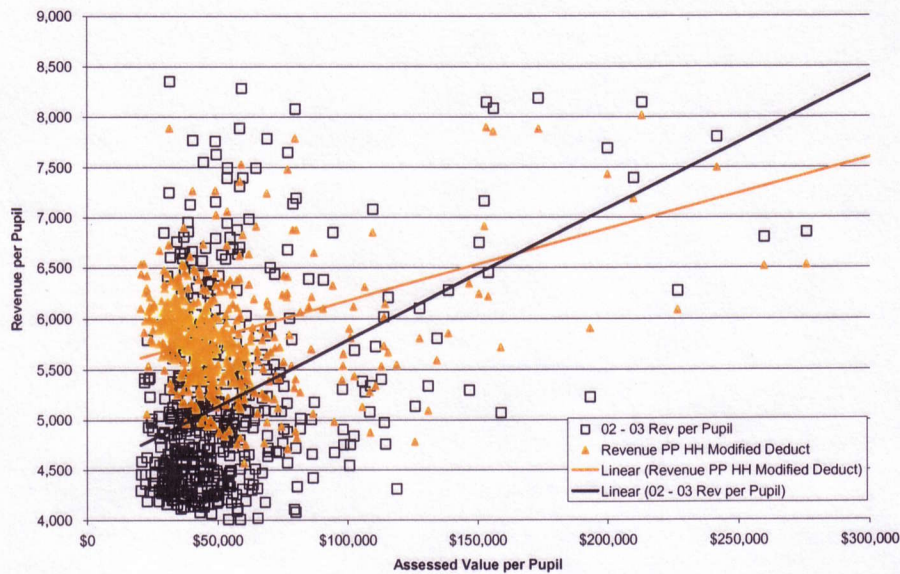
Equity Output

	2002 - 03	New Formula
Mean	\$ 5,570	\$ 5,944
Stdev	\$ 1,181	\$ 856
CV	21%	14%
95%ile	\$8,082	\$ 7,789
5%ile	\$4,178	\$ 4,979
FRR	0.93	0.56
McLoone	0.88	0.94
GINI	0.12	0.07

Option II: Revenue Changes

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Changes in Aid by Wealth



Components To Be Phased In (e.g., 3 - 5 Years)

- Categorical Funding in yr 1
 - Group 1: Fold into general to increase GTB
 - Group 2: Fold into general to increase poverty adjustment in yr. 1
 - E.g., Remedial reading
 - Group 3: Flow thru's in yr. 1 (Phase out/in in new formula)
 - Special Education
 - Transportation
 - Vocational
 - Beginning of Capital Outlay Formula

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Phase In Analysis (3-5 Years)

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- Statistical analysis for “Cost Adjusted Tier I Aid”
 - Development of “comprehensive cost index” measuring “relative cost to achieve adequate outcomes in a school with X,Y, & Z characteristics, serving students with A,B, & C characteristics.”
 - Rigorous empirical analysis to determine the relative cost to each district of recruiting teachers of comparable quality
 - NCES index fails in this regard
 - Housing cost indices using district level data insufficient
 - Rigorous empirical analysis of costs associated with scale and sparsity (and policy considerations regarding districts small by necessity and districts small by choice)
 - Evaluation of the use of U.S. Census & other Missouri economic demographic data to predict local student needs (poverty, language proficiency & mild/mod disability) rather than relying on district headcount
 - May reduce headcount incentives that often occur in need based aid formulas Δ2-22-04Δ

