## EXHIBIT G

# Analyses of the Uniform Rate of Taxation (URT) and School Finance Equity 

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## Presentation Topics

- An examination of the URT
- Also, excess mills above the 25 mill URT rate
- An analysis of the equity of the state's school finance system
- Focus on specific educational resources such as teacher qualifications and before/after school programs, and educational outcomes
- Examine variation across wealth quintiles


## Uniform Rate of Taxation

## The Uniform Rate of Taxation Overview

- The URT is used to calculate the local share of foundation funding for school districts. By law the URT is set at 25 mills.
- The difference in revenue (if any) between what is raised locally by $98 \%$ of the URT X local assessed value and the foundation amount is provided in the form of state aid to districts.
- Local voters may approve additional maintenance \& operations (M\&O) mills above 25 mills in an election. These funds are discretionary.
- Local voters may also approve up to 3 mills of additional dedicated M\&O funding to be used for specific purposes.


## The Uniform Rate of Taxation Overview

- In FY 2018-19 the 25 mill URT (at 98\%) raised approximately \$1.2 billion.
- The per ADM amount ranged from $\$ 572$ to $\$ 6,781$ (the foundation amount in 2018-19).
- The full M\&O mill rate - including voter approved additional mills - ranged from 25 to 34.9 mills. The average M\&O mill rate was 25.69 mills.


## Increasing the URT

- Increasing the URT will change the state's state/local foundation revenue shares. The amount of change will depend on how much the URT is increased. As of 2018-19 the average local share was $39.5 \%$ compared to a state share of $60.5 \%$.
- The local share ranged from $8.4 \%$ to $100 \%$. State share from 0\% to 91.6\%.
- The value of additional levy revenue from 1.0 mill ranged from $\$ 14,128$ to $\$ 3.8$ million across districts.


## Change in State/Local Foundation Shares by Wealth Quintile with 1 Mill Increase in URT

- Using 2018-19 data, a 1 mill increase in the URT would raise an estimated additional $\$ 49.3$ million in local foundation revenues.
- The state average state/local share would change from $39.5 \%$ local / $60.5 \%$ state to 41.1\% local / 58.9\% state.

|  | Current 25 Mills |  | + 1 Mill to 26 Mills |  |
| :---: | :---: | :---: | :---: | :---: |
| Quintile | Local <br> Share | State <br> Share | Local <br> Share | State <br> Share |
| Q 1 | 63.8\% | 36.2\% | 65.9\% | 34.1\% |
| Q 2 | 40.6\% | 59.4\% | 42.2\% | 57.8\% |
| Q 3 | 32.5\% | 67.5\% | 33.8\% | 66.2\% |
| Q 4 | 26.6\% | 73.4\% | 27.6\% | 72.4\% |
| Q 5 | 20.0\% | 80.0\% | 20.8\% | 79.2\% |
| Ave. | 39.5\% | 60.5\% | 41.1\% | 58.9\% |

# Change in State/Local Foundation Shares by Wealth Quintile with 1 Mill Increase in URT 

State/Local Share at Current 25 Mills


State/Local Share at 26 Mills


## Increasing the URT

- A 1 mill increase in the URT would increase local property tax foundation revenues per ADM (and decrease state revenues by the same amount) by an average of $\$ 107$ per ADM. By wealth quintile the changes would be:
- Q 1: \$144 per ADM
- Q 2: \$110 per ADM
- Q 3: \$88 per ADM
- Q 4: \$54 per ADM


## Excess Maintenance \& Operations Mills

- In 2018-19, 59 of the 235 districts raised additional discretionary mills above the 25 mill URT.
- This additional millage ranged from 0.10 mills to 9.90 mills. The average additional millage was 2.73 mills.
- A total of 10 districts raised additional dedicated M\&O mills. These ranged from 0.90 mills to 3 mills - the statutory limit.
- The correlation coefficient between local wealth per ADM and excess M\&O mills was 0.229. The correlation between excess $\mathrm{M} \& \mathrm{O}$ revenue per ADM and local wealth was 0.424 , both below the generally accepted equity benchmark of 0.50


## Number of Districts with Excess M\&O Mills



## Average Excess M\&O Mill Rates: <br> Overall and by Wealth Quintile



## Average Excess M\&O Revenue Per ADM: Overall and by Wealth Quintile



## School Funding Equity

## Equity Analysis Approach to Date

- Because the Bureau of Legislative Research recently examined the equity of the school finance system using traditional equity study methods, we do not duplicate that work here.
- Instead, we examined how equitably certain educational inputs and outcomes were distributed across districts with varying levels of local wealth.
- In addition to basic equity measures such as the correlation coefficient and coefficient of variation, we compare these resources and outcomes across wealth quintiles.


## Horizontal Equity and Fiscal Neutrality

- BLR equity study examining foundation and property tax funding per ADM and foundation plus targeted categorical funding per ADM found that the school finance system is quite equitable.

|  | Foundation and Property Tax Funding |  |  | Foundation Plus Other Targeted Categorical Funding |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2014 | 2015 | 2016 | 2014 | 2015 | 2016 |
| Horizontal Equity |  |  |  |  |  |  |
| Mean | \$7,098 | \$7,333 | \$7,392 | \$7,878 | \$8,107 | \$8,188 |
| Restricted Range | \$2,073 | \$1,852 | \$1,700 | \$2,487 | \$2,371 | \$2,563 |
| Coefficient of Variation | 0.19 | 0.17 | 0.16 | 0.15 | 0.16 | 0.15 |
| McLoone Index | 0.955 | 0.963 | 0.969 | 0.948 | 0.954 | 0.958 |
| Gini Coefficient | 0.055 | 0.056 | 0.040 | 0.060 | 0.060 | 0.058 |
| Fiscal Neutrality |  |  |  |  |  |  |
| Correlation Coefficient | 0.83 | 0.89 | 0.88 | 0.78 | 0.85 | 0.83 |

Source: Bureau of Legislative Research, Equity of Revenues and
Expenditures in Arkansas School Districts. September 2017

## Personnel Resources

- The study team examined:
- Teachers per 1,000 students
- Administrators per 1,000 students
- Percent of teachers with MAs
- Teachers' average years of experience
- Teacher/classroom average salaries
- Administrator average salaries


## Equity Statistics for Personnel Resources

| Variable | Statistic | $\mathbf{2 0 1 3 - 1 4}$ | $\mathbf{2 0 1 4 - 1 5}$ | $\mathbf{2 0 1 5 - 1 6}$ | $\mathbf{2 0 1 6 - 1 7}$ | $\mathbf{2 0 1 7 - 1 8}$ | $2018-19$ |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Teachers per <br> 1,000 students | Mean | 86.8 | 88.8 | 95.0 | 96.8 | 100.9 | 101.6 |
|  | Coefficient of <br> Variation | 0.206 | 0.238 | 0.286 | 0.300 | 0.304 | 0.312 |
|  | Correlation <br> Coefficient | 0.239 | 0.272 | 0.236 | 0.211 | 0.208 | 0.200 |
| Administrators <br> per 1,000 <br> students | Mean | 7.5 | 7.7 | 7.5 | 7.4 | 7.6 | 7.5 |
|  | Coefficient of <br> Variation | 0.328 | 0.339 | 0.322 | 0.298 | 0.368 | 0.297 |
|  | Correlation <br> Coefficient | 0.117 | 0.172 | 0.195 | 0.192 | 0.139 | 0.170 |

## Teachers per 1,000 Students by Wealth Quintile



## Administrators per 1,000 Students by Wealth Quintile



## Equity Statistics for Personnel Resources

| Variable | Statistic | $\mathbf{2 0 1 3 - 1 4}$ | $\mathbf{2 0 1 4 - 1 5}$ | $\mathbf{2 0 1 5 - 1 6}$ | $\mathbf{2 0 1 6 - 1 7}$ | $2017-18$ | $2018-19$ |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Percent Teachers <br> with MA | Mean | $43.0 \%$ | $42.6 \%$ | $38.1 \%$ | $39.0 \%$ | $39.8 \%$ | $40.9 \%$ |
|  | Coefficient of <br> Variation | 0.288 | 0.301 | 0.287 | 0.281 | 0.274 | 0.271 |
|  | Correlation <br> Coefficient | 0.011 | 0.016 | 0.013 | 0.035 | 0.026 | 0.086 |
| Teacher Average <br> Years of <br> Experience | Mean | Coefficient of <br> Variation | 0.201 | 0.224 | 0.244 | 0.254 | 0.271 |
|  | Correlation <br> Coefficient | -0.111 | -0.098 | -0.112 | -0.083 | -0.074 | -0.062 |

## Percent of Teachers with MA by Wealth Quintile



Teachers' Average Years of Experience by Wealth Quintile


## Equity Statistics for Personnel Resources

| Variable | Statistic | 2013-14 | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Average Teacher <br> (Classroom) <br> Salaries ${ }^{1}$ | Mean | \$43,906 | \$44,184 | \$44,608 | \$44,838 | \$45,357 | \$46,076 |
|  | Coefficient of Variation | 0.104 | 0.105 | 0.105 | 0.108 | 0.103 | 0.097 |
|  | Correlation Coefficient | 0.009 | 0.038 | 0.013 | 0.032 | 0.051 | 0.056 |
| Average <br> Administrator Salaries | Mean | \$71,565 | \$71,960 | \$73,799 | \$75,173 | \$75,750 | \$76,902 |
|  | Coefficient of Variation | 0.123 | 0.139 | 0.124 | 0.122 | 0.138 | 0.115 |
|  | Correlation Coefficient | 0.083 | 0.038 | 0.058 | 0.078 | 0.073 | 0.068 |

${ }^{1}$ Classroom staff includes teachers, librarians and counselors

## Average Teacher (Classroom) Salary by Wealth Quintile



## Average Administrators Salary by Wealth Quintile



## Program Resources

- The study team examined:
- Percent of students taking AP courses in high school
- Percent of students taking computer science courses in high school
- Percent of a district's schools offering before school programs
- Percent of a district's schools offering after school programs
- Percent of a district's schools offering summer school programs


## Program Resources Summary Statistics

| Variable | Statistic | 2013-14 | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percent of Students Taking AP Courses | Mean | 20.8\% | 29.7\% | 29.2\% | 37.5\% | 36.8\% | 37.5\% |
|  | Coefficient of Variation | 0.588 | 0.610 | 0.609 | 0.654 | 0.659 | 0.669 |
|  | Correlation Coefficient | 0.110 | -0.054 | -0.059 | -0.013 | 0.010 | 0.059 |
| Percent of <br> Students Taking <br> Computer <br> Science Courses | Mean | 0.1\% | 0.3\% | 0.3\% | 1.4\% | 10.1\% | 12.4\% |
|  | Coefficient of Variation | 7.57 | 4.37 | 4.15 | 2.31 | 1.16 | 1.06 |
|  | Correlation Coefficient | 0.026 | -0.034 | -0.050 | -0.002 | 0.141 | 0.155 |

## Percent of Students Taking AP Courses in High School by Wealth Quintile



Note: Counts are not unduplicated counts

Percent of Students Taking Computer Science Courses in High School by Wealth Quintile


## Program Resources Summary Statistics

| Variable | Statistic | 2013-14 | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percent of District Schools Offering Before School Program | Mean | NA | NA | 14.2\% | 14.7\% | 14.3\% | 15.4\% |
|  | Coefficient of Variation | NA | NA | 1.83 | 1.79 | 1.76 | 1.76 |
|  | Correlation Coefficient | NA | NA | -0.080 | 0.017 | -0.009 | 0.008 |
| Percent of District Schools Offering After School Program | Mean | NA | NA | 46.8\% | 46.9\% | 46.8\% | 45.6\% |
|  | Coefficient of Variation | NA | NA | 0.795 | 0.804 | 0.789 | 0.800 |
|  | Correlation Coefficient | NA | NA | -0.148 | -0.087 | -0.038 | 0.059 |
| Percent of District Schools Offering Summer School Program | Mean | NA | NA | 29.7\% | 29.8\% | 28.6\% | 30.2\% |
|  | Coefficient of Variation | NA | NA | 1.251 | 1.241 | 1.174 | 1.106 |
|  | Correlation Coefficient | NA | NA | -0.075 | -0.079 | -0.023 | 0.010 |

# Percent of District Schools Offering Before School Programs by Wealth Quintile 



# Percent of District Schools Offering After School Programs by Wealth Quintile 



# Percent of District Schools Offering Summer School Programs by Wealth Quintile 



## Educational Outcomes

- The study team examined:
- Percent of students in all grades meeting or exceeding standards on the ACT Aspire math assessment.
- Percent of students in all grades meeting or exceeding standards on the ACT Aspire literacy assessment.
- Counts of disciplinary actions per 100 students.


## Educational Outcomes Summary Statistics

| Variable | Statistic | 2013-14 | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ACT Aspire <br> Math: Percent of <br> Students <br> Meeting/Exceedi <br> ng Standards | Mean | NA | NA | 42.3\% | 45.6\% | 44.0\% | 44.2\% |
|  | Coefficient of Variation | NA | NA | 0.255 | 0.254 | 0.276 | 0.278 |
|  | Correlation Coefficient | NA | NA | -0.017 | -0.040 | -0.064 | -0.093 |
| ACT Aspire <br> Literacy: Percent of Students <br> Meeting/Exceedi ng Standards | Mean | NA | NA | 46.9\% | 51.3\% | 41.6\% | 42.2\% |
|  | Coefficient of Variation | NA | NA | 0.224 | 0.216 | 0.266 | 0.264 |
|  | Correlation Coefficient | NA | NA | 0.033 | 0.020 | -0.023 | -0.069 |
| Disciplinary <br> Actions per 100 <br> Students | Mean | 28.8 | 34.5 | 36.2 | 34.7 | 35.0 | 34.4 |
|  | Coefficient of Variation | 1.05 | 0.928 | 0.950 | 0.896 | 0.861 | 0.867 |
|  | Correlation Coefficient | -0.025 | 0.009 | 0.040 | 0.038 | 0.106 | 0.071 |

Percent of Students Meeting/Exceeding Standards on ACT Aspire Math Assessment by Wealth Quintile

*Includes all grades

Percent of Students Meeting/Exceeding Standards on ACT Aspire Literacy Assessment by Wealth Quintile


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## Disciplinary Actions Per 100 Students by Wealth Quintile


*Includes expulsions, out-of-school suspensions and in-school suspensions.

Questions?


[^0]:    *Includes all grades

