

# Education Funding Model

Status Report – May 9, 2019



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# Education Funding Model – Basic Principles

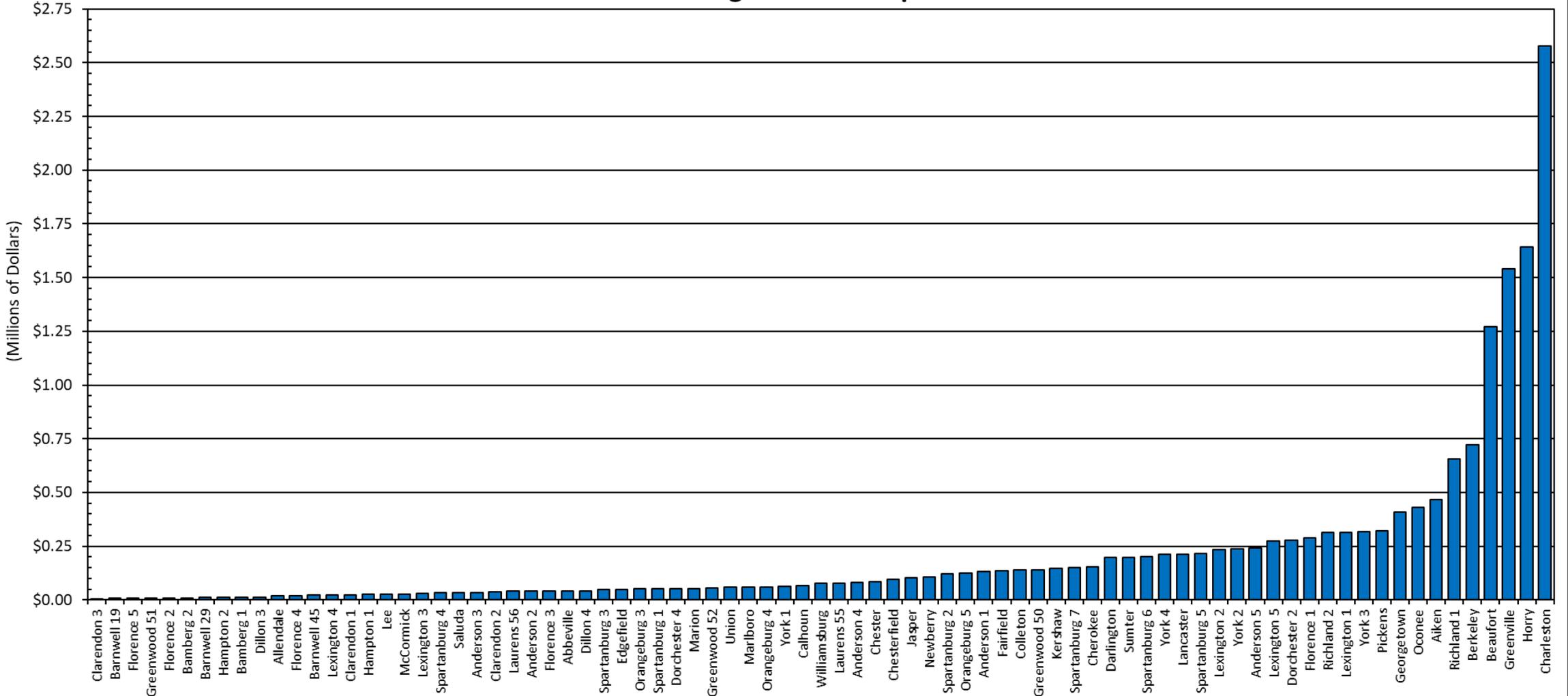
- Students drive the need for resources
- Resources:
  - Instruction
  - Facilities and Transportation
  - District Services
- Additional Considerations:
  - Policy issues affecting model and assumptions
  - Equity issues

# Equity Issues

- Extreme variation in property tax base
  - Value of one mill ranges from \$18,000 to \$2,600,000
  - Districts with a lower assessed value need nearly 10.5 mills where districts with a higher assessed value need tenths of a mill to add one new teacher
  - The same trend is seen when funding a \$20 Million facility
    - Districts with a lower assessed value need around 192 mills where districts with a higher assessed value need about 1 - 2 mills
- State Program versus local option

# ESTIMATED VALUE OF A MILL BY SCHOOL DISTRICT - TY 2017

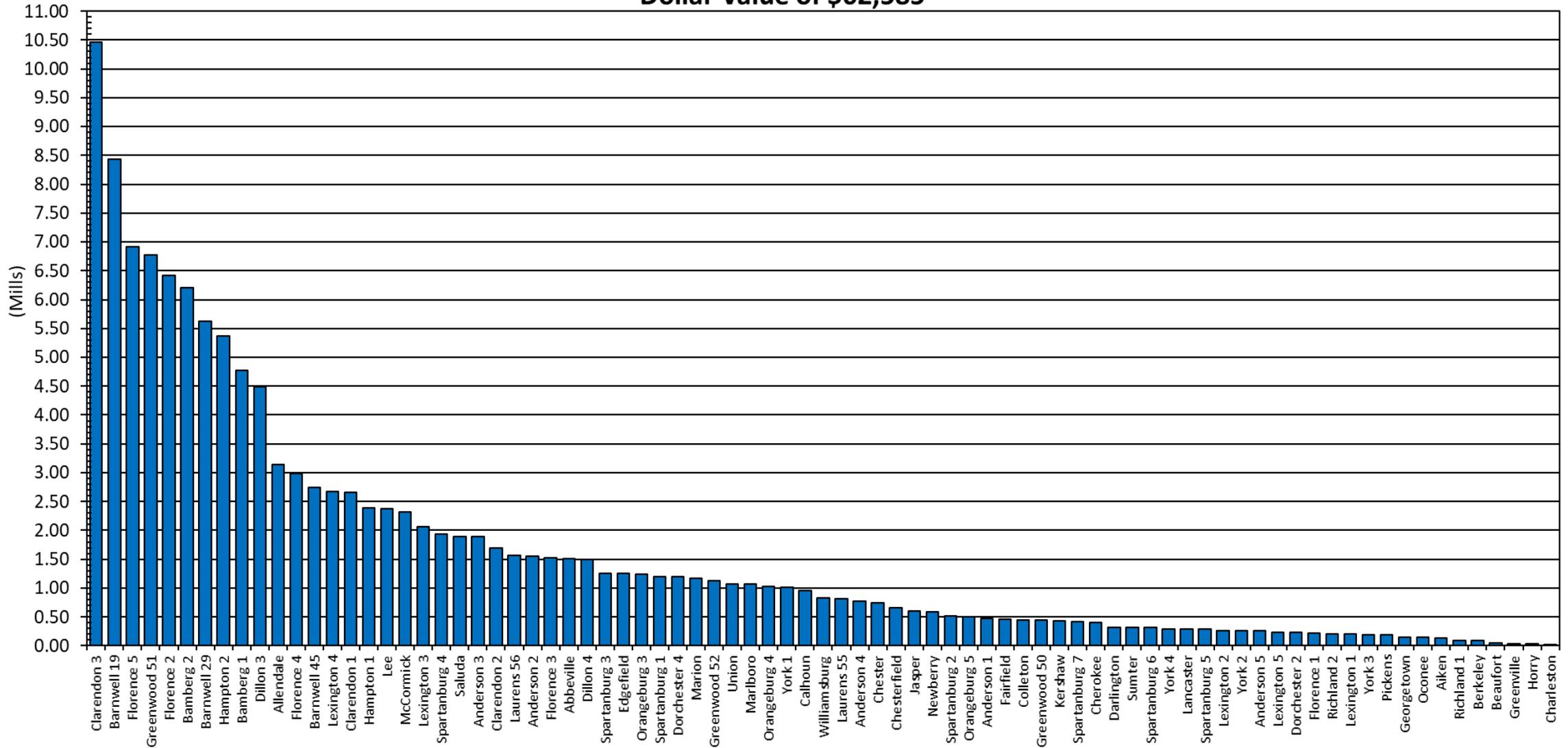
## Excluding Owner Occupied



Note: Includes fee-in-lieu property

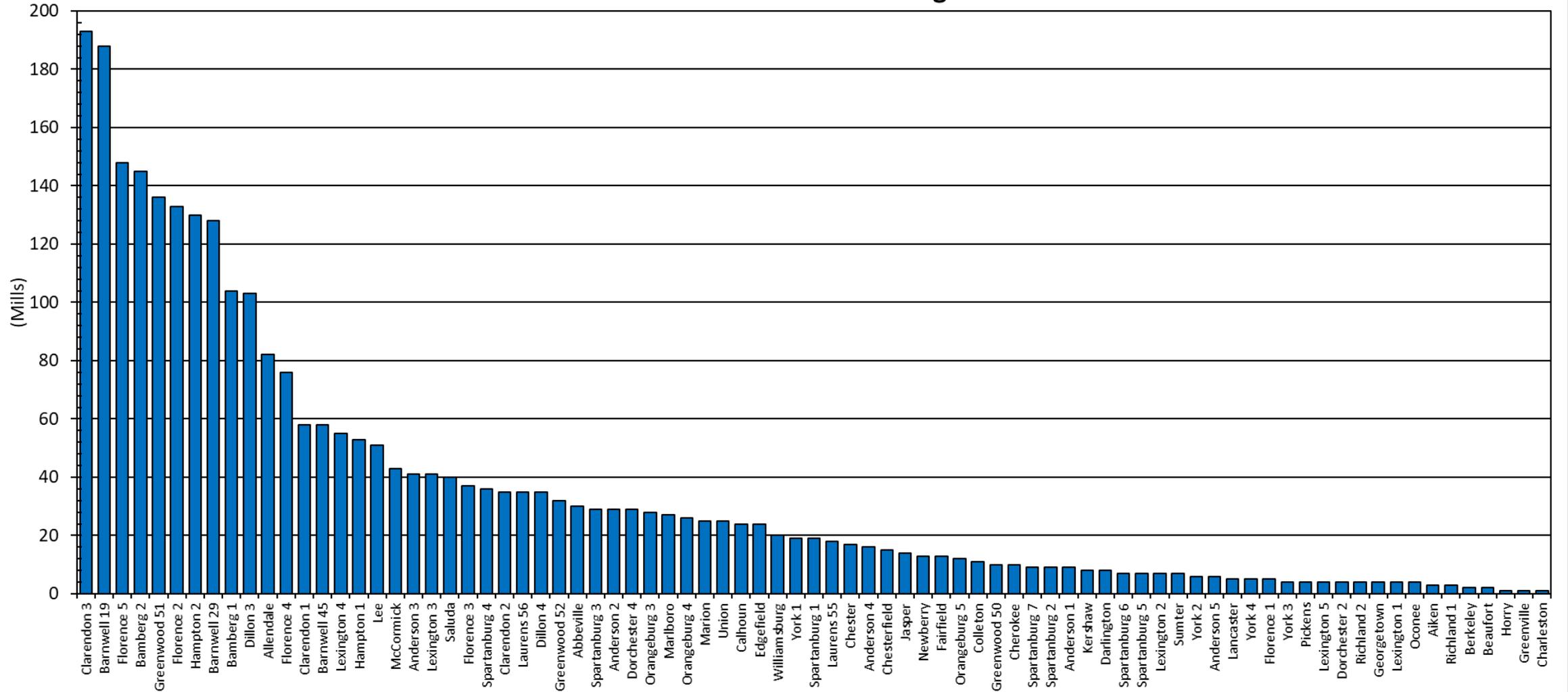
## MILLAGE RATE EQUIVALENT TO ONE NEW TEACHER - TY 2017

Dollar Value of \$62,585



## ESTIMATED DEBT SERVICE MILLAGE RATE TO FUND A \$20 MILLION FACILITY - TY 2017

### Based on School Debt Millage

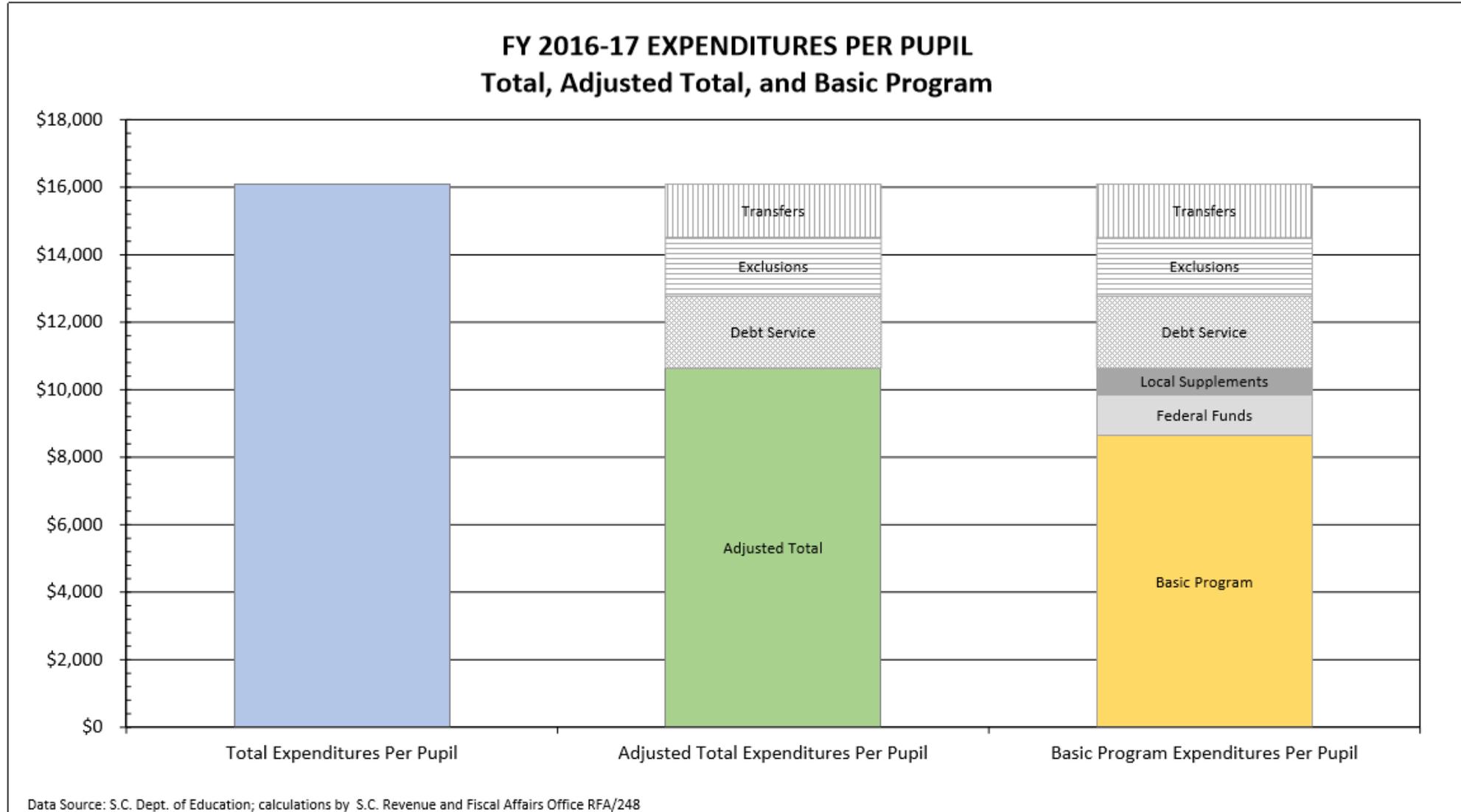


Note: Based on 5% interest and a 15 year repayment schedule

# Steps in developing model

- Create a reference point for estimating and categorizing expenditures
- Develop model
- Test model
- Receive feedback

# RFA Expenditure Categories



# RFA Expenditure Categories

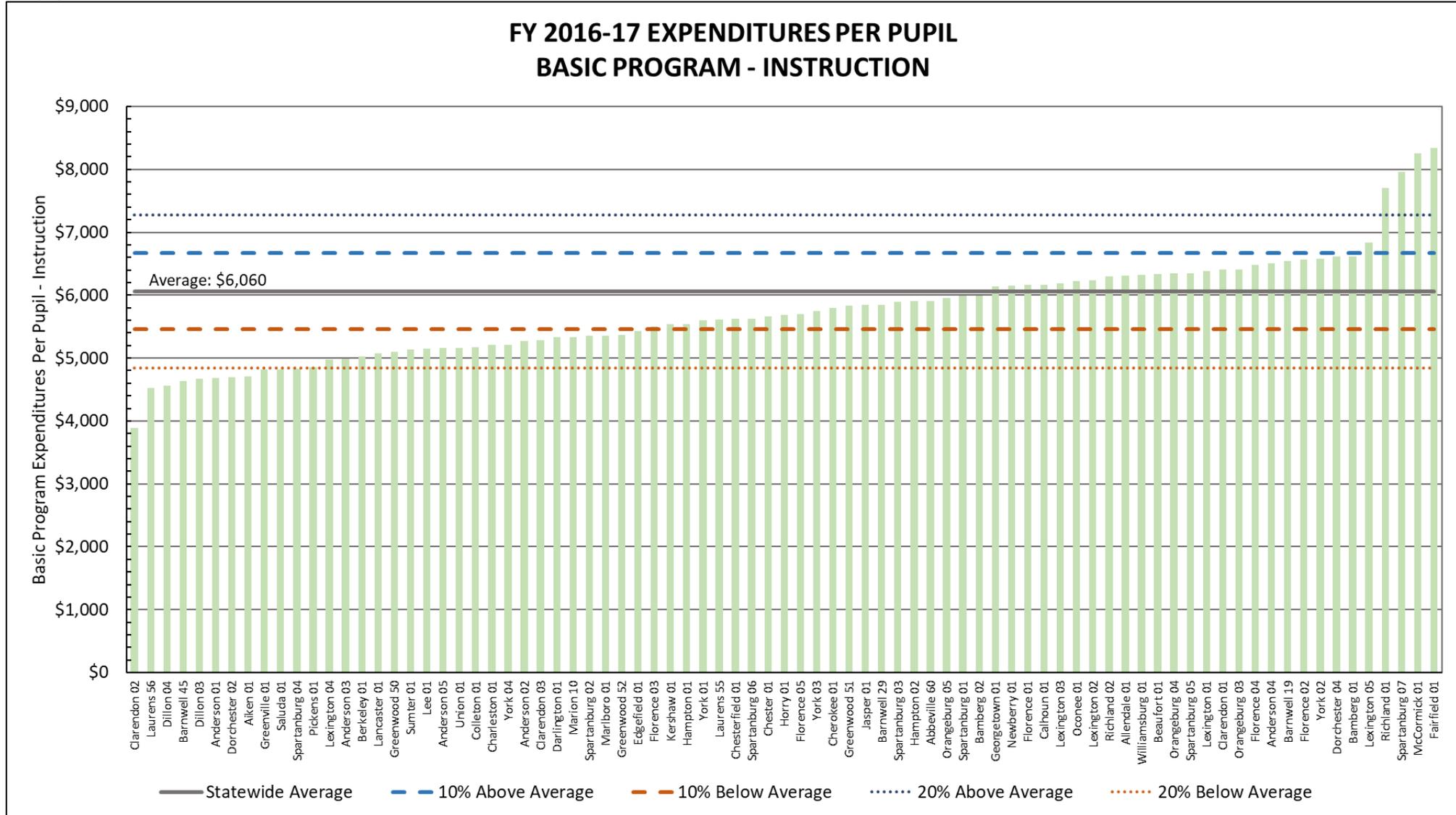
*RFA/Model*

	<b>TOTAL</b>		<b>Instruction</b>		<b>Facilities and Transportation</b>		<b>District Services</b>		<b>Other Services</b>	
	Total Expenditures - 81 Regular Districts	Total Expenditures - Per Pupil	Total Expenditures	Per Pupil Expenditures	Total Expenditures	Per Pupil Expenditures	Total Expenditures	Per Pupil Expenditures	Total Expenditures	Per Pupil Expenditures
Total	\$11,589,286,021	\$16,099								
Transfers	\$1,138,302,667	\$1,581								
Exclusions from Model	\$1,251,858,348	\$1,739								
Debt Service	\$1,540,521,504	\$2,140								
<b>Adjusted Total</b>	<b>\$7,658,603,502</b>	<b>\$10,639</b>	<b>\$5,395,307,651</b>	<b>\$7,495</b>	<b>\$1,446,102,007</b>	<b>\$2,009</b>	<b>\$553,353,408</b>	<b>\$769</b>	<b>\$263,840,436</b>	<b>\$367</b>
Federal Funding	\$868,177,873	\$1,206								
Local Salary Programs	\$563,695,492	\$783								
<b>Basic Program Expenditures</b>	<b>\$6,226,730,137</b>	<b>\$8,650</b>	<b>\$4,362,758,516</b>	<b>\$6,060</b>	<b>\$1,102,113,118</b>	<b>\$1,531</b>	<b>\$498,018,067</b>	<b>\$692</b>	<b>\$263,840,436</b>	<b>\$367</b>

# Expenditures - Instruction

	Total Expenditures - 81 Regular Districts	Total Expenditures Per Pupil	Basic Program	Basic Program Per Pupil	Examples of Services
<b>TOTAL - Instruction</b>	<b>\$5,395,307,651</b>	<b>\$7,495</b>	<b>\$4,362,758,516</b>	<b>\$6,060</b>	
<i>Instruction</i>	\$4,066,421,387	\$5,649	\$3,200,481,843	\$4,446	<i>Classroom</i>
<i>Instructional Support</i>	\$369,022,722	\$513	\$298,399,485	\$415	<i>Guidance, Library, etc.</i>
<i>Vocational</i>	\$168,180,479	\$234	\$151,362,431	\$210	<i>Career Education</i>
<i>Health and Social Workers</i>	\$139,723,511	\$194	\$125,751,160	\$175	<i>School Nurses</i>
<i>IT (estimated at 85% of total IT)</i>	\$159,543,550	\$222	\$143,589,195	\$199	<i>Classroom Technology</i>
<i>School Administration</i>	\$492,416,002	\$684	\$443,174,402	\$616	<i>Principals and school staff</i>

# Expenditures - Instruction



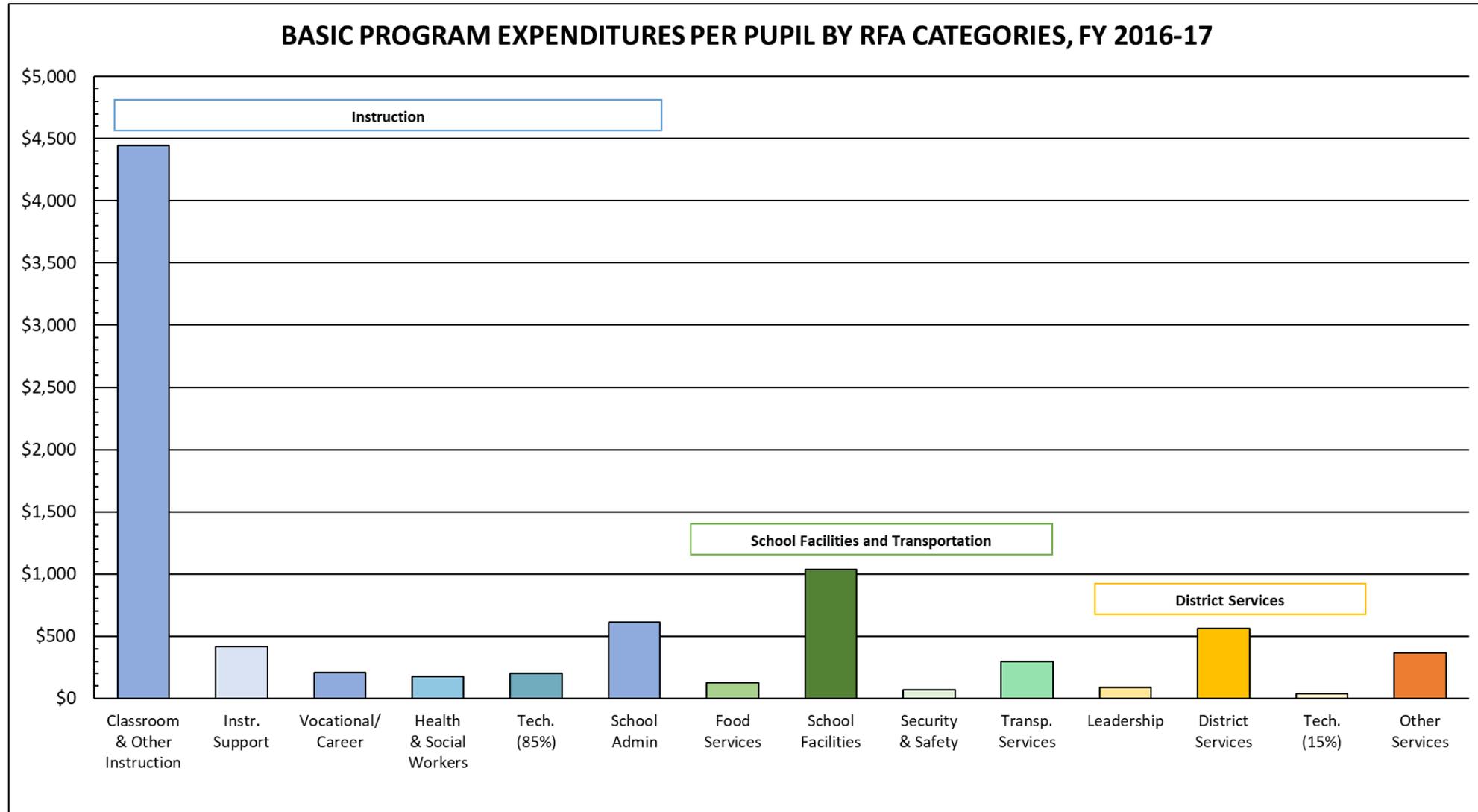
# Expenditures - Facilities and Transportation

	<b>Total Expenditures - 81 Regular Districts</b>	<b>Total Expenditures Per Pupil</b>	<b>Basic Program</b>	<b>Basic Program Per Pupil</b>
<b>TOTAL - Facilities and Transportation</b>	<b>\$1,446,102,007</b>	<b>\$2,009</b>	<b>\$1,102,113,118</b>	<b>\$1,531</b>
<i>Food Services</i>	\$410,138,088	\$570	\$91,939,069	\$128
<i>School Facilities</i>	\$747,970,507	\$1,039	\$745,789,842	\$1,036
<i>Security and Safety</i>	\$51,901,359	\$72	\$51,901,359	\$72
<i>Technology Infrastructure</i>	\$0	\$0	\$0	\$0
<i>Transportation</i>	\$236,092,053	\$328	\$212,482,848	\$295

# Expenditures - District Services

	Total Expenditures - 81 Regular Districts	Total Expenditures Per Pupil	Basic Program	Basic Program Per Pupil
<b>TOTAL - District Services</b>	<b>\$553,353,408</b>	<b>\$769</b>	<b>\$498,018,067</b>	<b>\$692</b>
<i>Leadership</i>	\$72,720,853	\$101	\$65,448,768	\$91
<i>District Services</i>	\$452,477,811	\$629	\$407,230,030	\$566
<i>IT (estimated at 15% of total IT)</i>	\$28,154,744	\$39	\$25,339,270	\$35

# RFA Expenditure Categories



# Develop Model

# Model - Instruction

- Key factors in model:
  - Cost of a teacher
  - Number of teachers and student/teacher ratios
  - Number of students
  - Technology, other staff

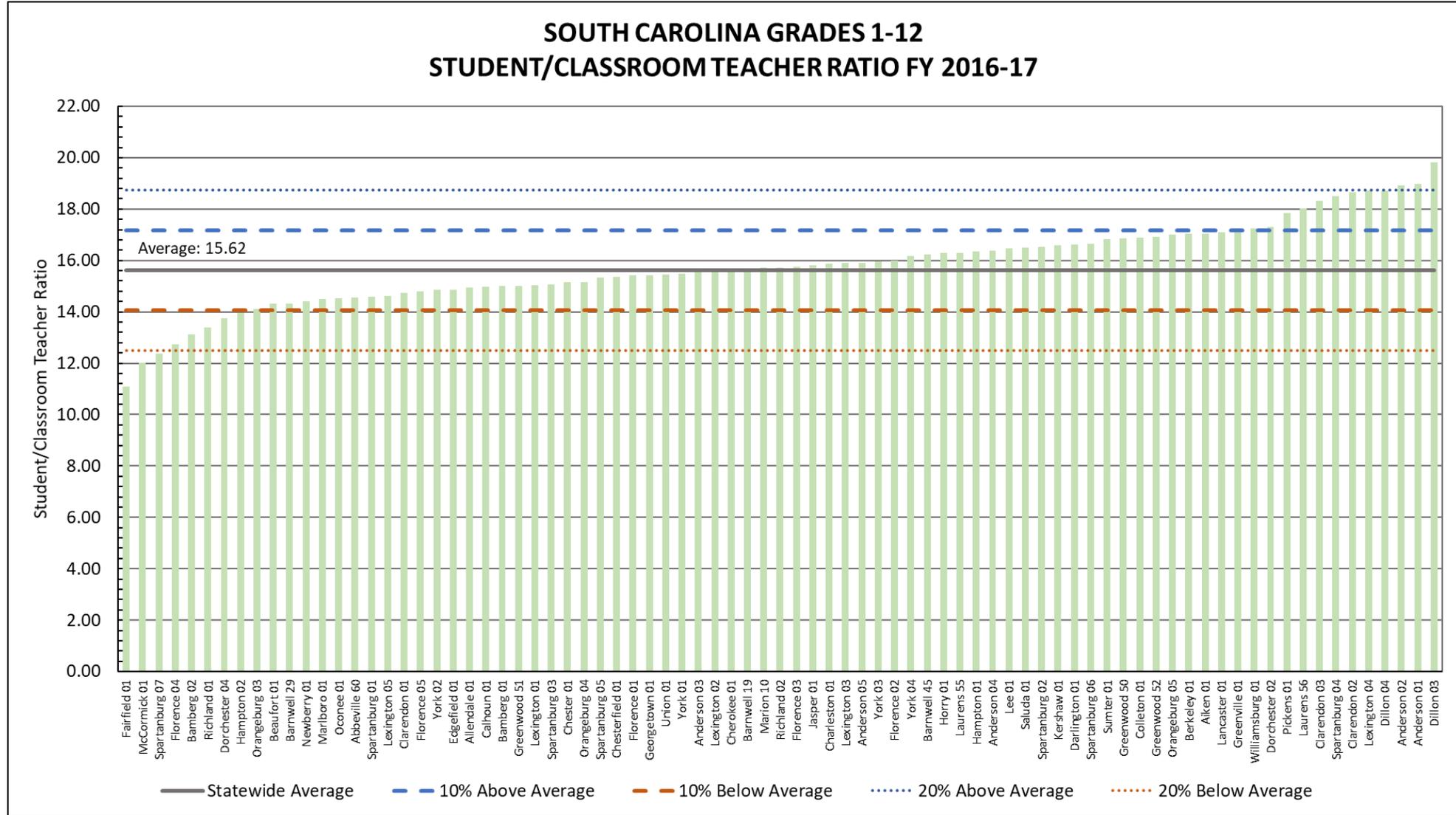
# Cost of a Teacher, FY 2016-17

- Average total cost = \$62,585
  - Includes average salary based on SC Minimum Salary Schedule, employer contribution, health insurance, and professional development (TBD)
  - Total cost varies based on number of teachers needed due to different student/teacher ratios

# Current Student-Teacher Ratios

All Instructional Staff	12.7 : 1	<i>(Includes: all certified staff eligible for EIA salary supplement)</i>
Kindergarten Teachers	20.1 : 1	<i>(Includes: Kindergarten (05) teachers)</i>
Classroom Teachers (1-12)	15.6 : 1	<i>(Includes: Classroom (08), Retired (09), and Special Education - Self Contained (06) teachers)</i>
Sp. Ed. Resource	?	<i>(Includes: Special Education - Resource (07) teachers)</i>
Sp. Ed. Itinerant	?	<i>(Includes: Special Education - Itinerant (03) teachers)</i>
Speech Therapists	?	<i>(Includes: Speech Therapists (17))</i>
Guidance	347 : 1	<i>(Includes: Guidance Counselors (11))</i>

# Student/Teacher Ratios



# Student/Teacher Ratios – Worksheet Example

## Kindergarten Teacher Ratios, FY 2016-17 - Example and Option for Poverty/Non-Poverty

District	Actual Counts							Kindergarten Students in Poverty			Kindergarten Students in Non Poverty			Total Estimated	
	Total ADM	Pupils in Poverty	% Poverty	Kindergarten ADM	Kindergarten Teachers	Aides	Kindergarten Ratio	Estimated ADM	Assume 15:1 Student/Teacher Ratio	Number of Teachers Needed	Estimated ADM	Assume 20:1 Student/Teacher Ratio	Number of Teachers Needed	Total Teachers Needed	Actual - Estimated
ABBEVILLE 60	2,919	2,325	79.66%	222	14		16	177	15	12	45	20	2	14	(0)
AIKEN 01	24,016	17,537	73.02%	1,821	79		23	1,330	15	89	491	20	25	113	(34)
ALLENDALE 01	1,149	1,132	98.52%	98	3		33	96	15	6	1	20	0	6	(3)
ANDERSON 01	9,631	5,748	59.68%	677	26		26	404	15	27	273	20	14	41	(15)
ANDERSON 02	3,688	2,596	70.38%	250	12		21	176	15	12	74	20	4	15	(3)
ANDERSON 03	2,504	2,037	81.35%	172	9		19	140	15	9	32	20	2	11	(2)
ANDERSON 04	2,812	1,937	68.89%	198	9		22	136	15	9	62	20	3	12	(3)
ANDERSON 05	12,438	8,787	70.65%	983	43		23	695	15	46	289	20	14	61	(18)
BAMBERG 01	1,327	1,048	78.98%	91	4		23	72	15	5	19	20	1	6	(2)
BAMBERG 02	669	653	97.66%	65	4		16	64	15	4	2	20	0	4	(0)
BARNWELL 19	627	598	95.35%	47	2		24	45	15	3	2	20	0	3	(1)
BARNWELL 29	873	752	86.11%	60	3		20	51	15	3	8	20	0	4	(1)
BARNWELL 45	2,142	1,794	83.75%	170	6		28	142	15	9	28	20	1	11	(5)
BEAUFORT 01	20,916	14,331	68.52%	1,564	72		22	1,071	15	71	492	20	25	96	(24)
BERKELEY 01	32,962	24,065	73.01%	2,439	111		22	1,781	15	119	658	20	33	152	(41)
CALHOUN 01	1,648	1,501	91.07%	147	7		21	133	15	9	13	20	1	10	(3)
CHARLESTON 01	46,468	29,261	62.97%	3,825	180		21	2,409	15	161	1,416	20	71	231	(51)
CHEROKEE 01	8,569	6,917	80.72%	673	30		22	543	15	36	130	20	6	43	(13)
CHESTER 01	5,040	4,180	82.94%	394	19		21	326	15	22	67	20	3	25	(6)
CHESTERFIELD 01	6,980	5,778	82.78%	530	15		37	439	15	29	91	20	5	34	(19)
CLARENDON 01	741	728	98.30%	48	2		24	47	15	3	1	20	0	3	(1)
CLARENDON 02	2,799	2,582	92.23%	198	10		20	183	15	12	15	20	1	13	(3)
CLARENDON 03	1,191	829	69.61%	86	5		17	60	15	4	26	20	1	5	(0)
COLLETON 01	5,486	4,898	89.28%	386	15		26	345	15	23	41	20	2	25	(10)
DARLINGTON 01	9,822	8,171	83.19%	706	33		21	587	15	39	119	20	6	45	(12)

# Model - Instructional Cost Example

	Headcount/ Service Need	Student/ Teacher Ratio	Estimated # of Teachers	Avg. Cost / Teacher	Estimated Total Cost
I. Classroom					
Kindergarten	48,774	20:1	2,420	\$62,585	\$151,455,700
Aides	48,774		2,420	\$34,471	\$83,419,820
<i>OPTION - Adjust funding for poverty impact in Core Subject Areas</i>					
<i>Non-poverty Affected</i>					
<i>Poverty Affected</i>					
Classroom (1-12)*	671,105	17:1	40,208	\$62,585	\$2,516,417,680
<i>OPTION - Adjust funding for poverty impact in Core Subject Areas</i>					
<i>Non-poverty Affected</i>					
<i>Poverty Affected</i>					
Special Education (Self Contained)	?	?	2,393	\$62,585	\$149,765,905
I. Subtotal - Classroom					\$2,901,059,105
II. Enhanced Instruction					
Special Education (Itinerant and Resource)	?	?	2,609	\$62,585	\$163,284,265
Speech Therapists	?	?	903		?
Audiologists	?	?	10		?
Occupational/Physical Therapists	?	?	281		?
II. Subtotal - Enhanced Instruction					\$163,284,265

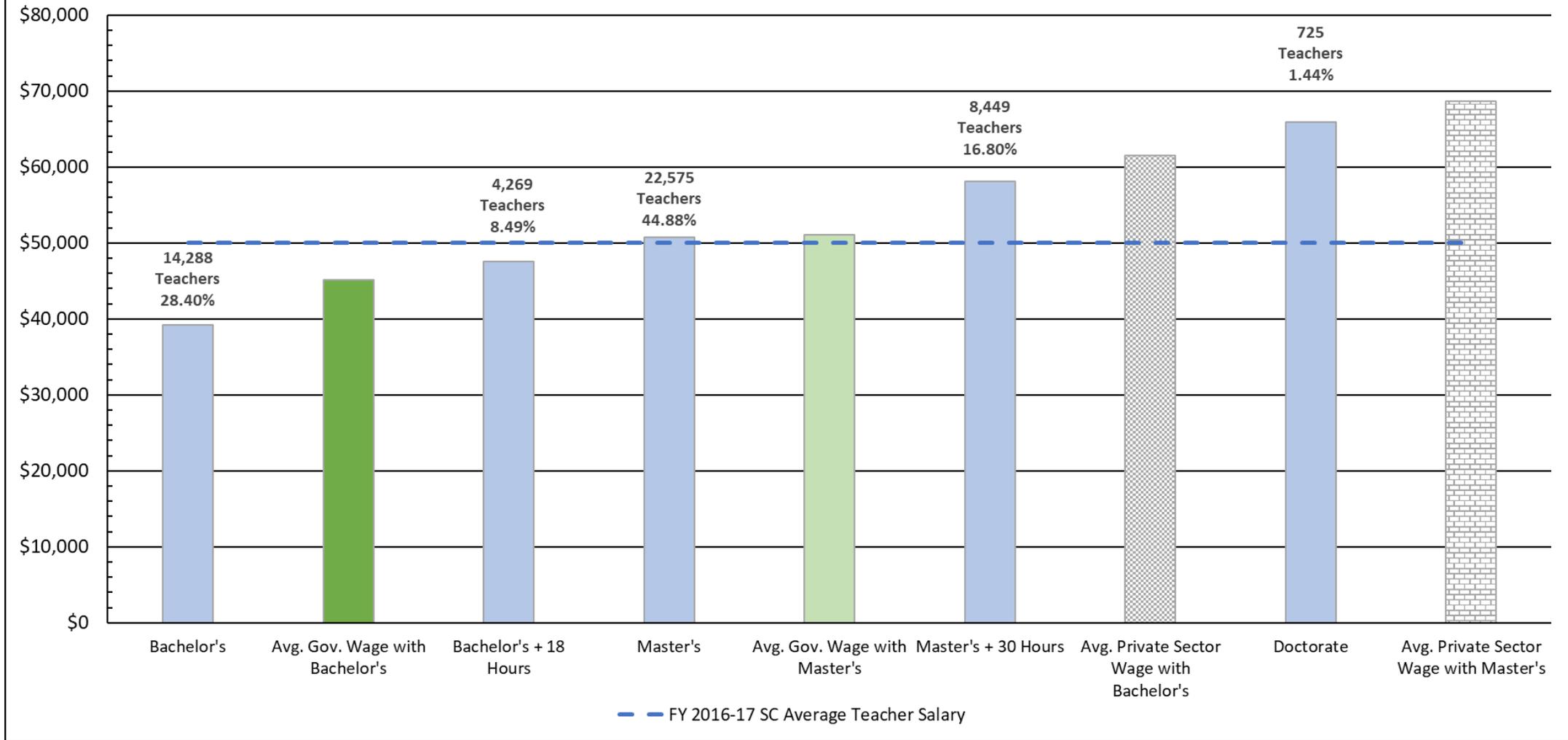
# Model – Instructional Cost Example

	Headcount/ Service Need	Student/ Teacher Ratio	Estimated # of Service Providers	Avg. Cost	Estimated Total Cost for Basic Program
III. Other Instruction					
Psychologists	?		2,420	\$62,585	\$151,455,700
Guidance Counselors*	719,879	347:1	2,072	\$62,585	\$129,676,120
Career Specialists	210,583	719:1	293	\$62,585	\$18,337,405
Library/Media *	719,879	665:1	1,082	\$62,585	\$67,716,970
ROTC Instructors	-	1.8/HS	367	\$62,585	\$22,968,695
III. <i>Subtotal - Other Instruction</i>					\$390,154,890
IV. Health and Social Services					
Nurses	719,879	527:1	1,367	\$62,585	\$85,553,695
Social Workers	?		198	\$62,585	\$12,391,830
IV. <i>Subtotal - Health and Social Services</i>					\$85,553,695
V. Technology (Instruction)					
Technology - 85%	719,879			\$168	\$120,941,149
V. <i>Subtotal - Technology (Instruction)</i>					\$120,941,149
VI. Vocational/Career					
Vocational and Career Education	103,590			?	\$130,970,398
VI. <i>Subtotal - Vocational/Career</i>					\$130,970,398
VII. School Administration					
Administrators/Principals		2.6/School	3,126	?	?
Administrative Staff			?	?	?
VII. <i>Subtotal - School Administration</i>					\$391,969,239
<b>Total Instruction</b>					<b>\$4,196,324,571</b>

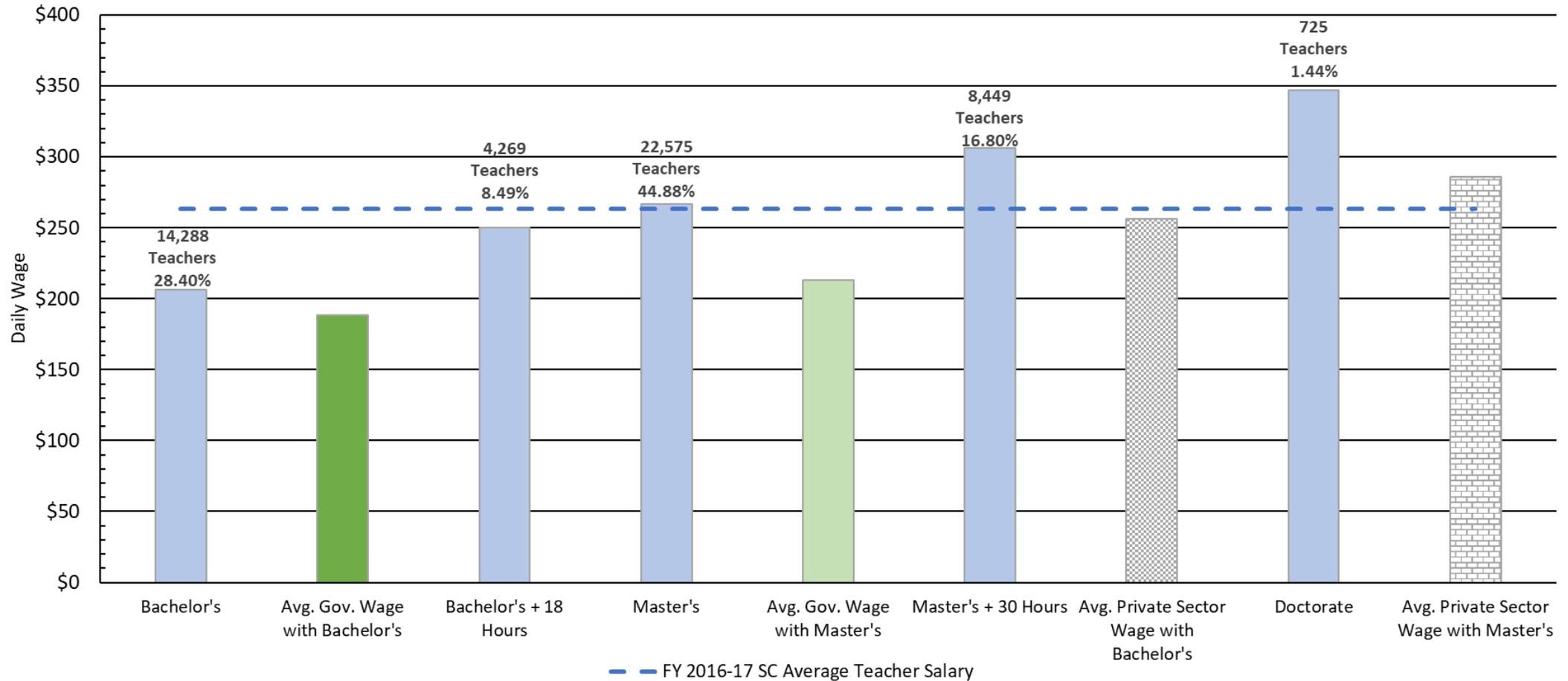
# Teacher Salary Analysis

- Competitiveness for salaries based on education level and years of experience
- Compare actual teacher salaries to wages for all government and private sector employees

## FY 2016-17 SOUTH CAROLINA ACTUAL AVERAGE TEACHER SALARY BY DEGREE VS. 2017 AVERAGE WAGE FOR GOVERNMENT AND PRIVATE SECTORS BY DEGREE

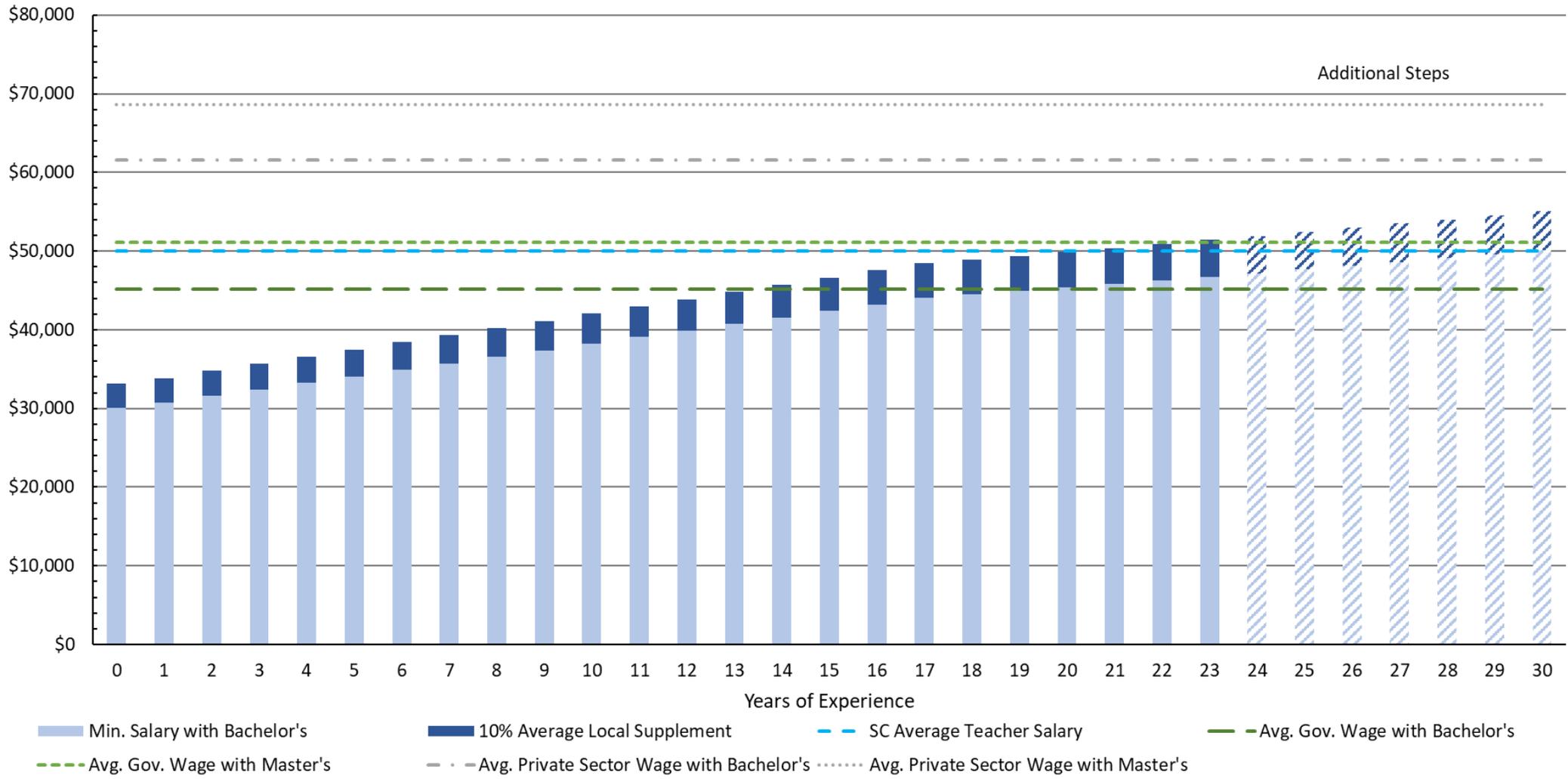


## FY 2016-17 AVERAGE DAILY WAGE FOR TEACHERS BY DEGREE VS. 2017 AVERAGE DAILY WAGE FOR GOVERNMENT AND PRIVATE SECTORS BY DEGREE

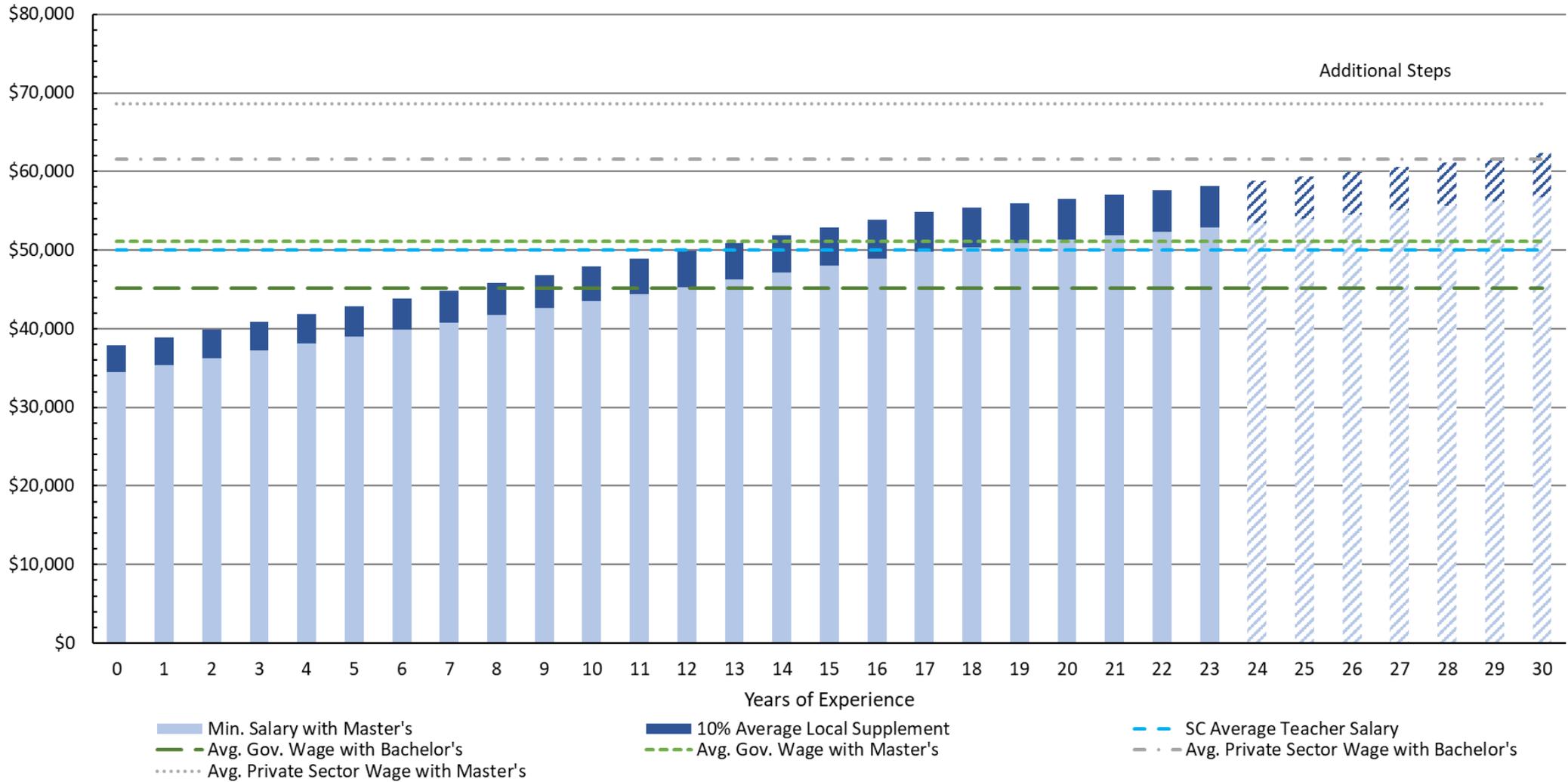


Note: Includes regular and special district teachers: pre-K, kindergarten, classroom, special education, and speech therapists. Based upon 190 teaching contract days and 240 all occupation working days.  
Data Source: U.S. Census Bureau, American Community Survey 2017, Public Use Microdata Sample; S.C. Dept. of Education Professional Certified Staff Data RFA/244

## FY 2016-17 STATE TEACHER SALARY - BACHELOR'S DEGREE AND LOCAL SUPPLEMENT BY YEARS OF SERVICE TO AVERAGE WAGE IN SOUTH CAROLINA



## FY 2016-17 STATE TEACHER SALARY - MASTER'S DEGREE AND LOCAL SUPPLEMENT BY YEARS OF SERVICE TO AVERAGE WAGE IN SOUTH CAROLINA



# Test Model

# Test Model - Instruction

Proposed Major Categories	Subcategories - Budgeting Components	Basic Program Total Funding	Model Results
<i>A. Instruction</i>		<b>\$4,362,758,516</b>	<b>\$4,196,324,571</b>
	Classroom and Enhanced Instruction	\$3,200,481,843	
	Other Instruction	\$298,399,485	
	Vocational/Career	\$151,362,431	
	Health and Social Workers	\$125,751,160	
	Technology (85%)	\$143,589,195	
	School Administration	\$443,174,402	

\*District comparisons will be performed once model is completed.

# Test Model – Facilities and Transportation

Proposed Major Categories	Subcategories - Budgeting Components	Basic Program Total Funding	Model Results
<i>B. Facilities and Transportation</i>		<b><i>\$1,102,113,118</i></b>	<b><i>TBD</i></b>
	Food Services	\$91,939,069	
	School Facilities	\$745,789,842	
	Security and Safety	\$51,901,359	
	Technology Infrastructure	\$0	
	Transportation Services	\$212,482,848	

\*District comparisons will be performed once model is completed.

# Test Model – District Services

Proposed Major Categories	Subcategories - Budgeting Components	Basic Program Total Funding	Model Results
<i>C. District Services</i>		<b>\$498,018,068</b>	<b>TBD</b>
	Leadership	\$65,448,768	
	District Services	\$407,230,030	
	Technology (15%)	\$25,339,270	

\*District comparisons will be performed once model is completed.

# Receive Feedback

# Next Steps

- Meet with stakeholders
- Verify and add missing data
- Address policy issues
- Accountability and Financial Reporting/Flexibility
- Update on September 12, 2019

# List of Policy Issues

- Overall
  - What standards or programs should be included or amended to align model with goals for providing a 21<sup>st</sup> century education?
  - What specific state laws or regulations should be considered in determining district flexibility?
- Current Status
  - Are the Instruction, Facilities and Transportation, and District Services categories comprised of the appropriate spending items?
  - What types of expenses should be funded by the state, state and local, or local?
- Budgeting Issues
  - What costs should be included in estimating the cost of a teacher for the basic program?
  - Should state appropriations be used to help fund salaries or employer contributions for local district decisions above the state program?
  - What types of expenses are state, state and local, or local?
  - What services can or should be shared and how can the state identify and encourage best practices for providing district services?
  - What spending flexibility should districts have with regard to budgeted expenditures?
  - To which specific education categories should Property Tax Relief funds be allocated?

# List of Policy Issues

- Budgeting Issues, continued
  - Should current EFA add-ons be addressed, other than poverty? If so, how should these services be measured and allocated?
  - Is dual-credit enrollment a public education or a technical college expense?
- Accountability, Flexibility, and Transparency
  - What are the accountability expectations of the stakeholders?
  - How much flexibility should be given regarding state funding?
  - What is the timing for implementation of modifications to accounting systems and reporting given the substantial changes under consideration?
- Competitive Workforce for Teachers
  - What is an appropriate measure for determining a competitive wage for teachers compared to other professions?
  - Should the state minimum salary schedule be extended beyond 23 years?
  - Is the difference in salary schedule among class of teachers acceptable or does it need to be adjusted?
  - What occupational wage categories, other than average state wage, should be used for comparing average teacher salaries in SC?
  - Should options be included to address potential costs for changes to working conditions, such as more planning or free time?
- Consolidation of Districts
  - What other types of analysis of district consolidation should be conducted?
- Long Term Focus
  - What other factors should be considered in long-term planning for education?
  - What is the priority order for implementing any changes to funding among equity, teacher salaries, classroom size, or other goals?

# Questions and Feedback

- Full report and accompanying material can be found at <http://rfa.sc.gov/econ/educ/model>
- Questions and feedback may be sent to [EdFund@rfa.sc.gov](mailto:EdFund@rfa.sc.gov)

