



ALVAREZ & MARSAL

SOUTH CAROLINA DEPARTMENT OF EDUCATION
SCHOOL DISTRICT EFFICIENCY REVIEW



June 16, 2017

SCHOOL DISTRICT EFFICIENCY REVIEW

PROJECT OVERVIEW

- This document contains observations and recommendations completed in conjunction with the School Efficiency Review conducted for the South Carolina Department of Education and pursuant to Part 1B Section 1 Proviso 1.92 of the FY2016-17 General Appropriations Act.
- The scope of the District Efficiency Review focused on the following central operations: **(1) finance; (2) human resources; (3) procurement; (4) transportation; and (5) overhead.**
 - Instructional, Food, Facilities and Technology functions were outside the scope of this efficiency review.
 - Facilities and Technology Assessments were completed in accordance with Part 1B of Proviso 1.92 and are separate from this report.
- A&M's review focused on identifying opportunities across the operational areas noted above that would yield:
 - 1. Increased Effectiveness and Efficiency**
 - Improved processes that would enable increased levels of service to the districts' students and teachers and enhance financial controls and financial stewardship of the District's funds and assets.
 - A&M considered potential opportunities that could be realized both in the current state and in a situation where the districts chooses to collaborate with other nearby or like-minded districts.
 - 2. Cost Avoidance and / or Cost Savings**
 - Enhanced processes and structures that would enable the District to realize savings and/or avoid potential costs in the future, including consideration of potential investments required to mitigate ongoing cost exposure.

SCHOOL DISTRICT EFFICIENCY REVIEW

PROJECT OVERVIEW (CONTINUED)

- A&M conducted School Efficiency Reviews of 79 of the 82 school districts in the State across two phases, each of which approximated nine weeks. Phase 1 included 32 districts (all Plaintiff districts) and Phase 2 included 47 districts. Three districts did not participate due to previously completed efficiency reports: Clarendon 1 (Plaintiff), Lexington 4 (Plaintiff) and Dorchester Two.
- In each phase, A&M conducted 2 site visits at each participating school district in order to meet with district personnel to understand their organizations, processes and approaches.
- The report identifies two primary themes that will help drive greater efficiency and effectiveness in school districts:
 1. **Modernize:** A series of one-time investments in technology that must be made in order to enhance processes and drive operational efficiency.
 2. **Collaborate:** Districts with low enrollment must perform and support a fixed, minimum cost structure that does not allow them to benefit from maximized economies of scale available to larger districts. There are a range of opportunities for cross-district collaboration that will realize efficiencies and generate the highest level of savings. *Efficiencies and effectiveness will increase as the number of districts collaborating increase.*
- This analysis presents two types of estimates:
 1. **Investments** in school district modernization necessary to drive future cost savings; and
 2. **Net savings** from implementation of a shared services model for functions within the scope of this study.

PROJECT OVERVIEW (CONTINUED)

➤ Sources of Data and Savings Estimates:

- A&M based the recommendations included in this report on data received from both the State and districts.
 - State provided data: FY16 revenue and expenditure data submitted by districts to the State, 3-year historical enrollment/average daily membership data, FY16 school transportation routes by district.
 - District provided data: FY17 personnel rosters, FY16 disbursements by vendor, vendor contracts and invoices, and various operational and financial metrics tracked and maintained by individual districts.
- Many districts were unable to provide all of the data requested. As a result of data limitations, savings estimates calculated rely on aggregate expenditure data to derive estimates for potential savings.
- Savings estimates are based on a series of assumptions about changes in process, staffing levels and technology (stand-alone and multi-district) that will vary upon implementation. Variation from the amounts presented as net savings are likely in the event the State of South Carolina implements a shared services model.

PROJECT OVERVIEW (CONTINUED)

➤ **Statewide Benchmarking Data:**

- A&M compiled a robust set of benchmarks and metrics to compare staffing and spending levels at each of the districts. Upon completion of the review of all districts in the State, A&M provided the State Education Department with access to a database containing an analytics dashboard to enable cross-district analytics and gain further insights into the rationale behind A&M's observations and recommendations.

➤ **Implementation:**

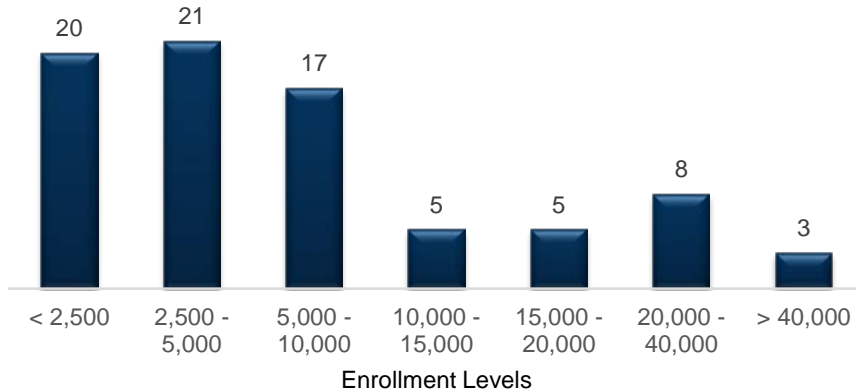
- Implementation of certain recommendations included in this report will require one-time investments in order to achieve savings. A&M has developed preliminary estimates for these costs that will likely need to be refined as additional information regarding decisions on implementation plans and approach become available.

SCHOOL DISTRICT EFFICIENCY REVIEW

PROFILE OF REVIEWED DISTRICTS

Student Population

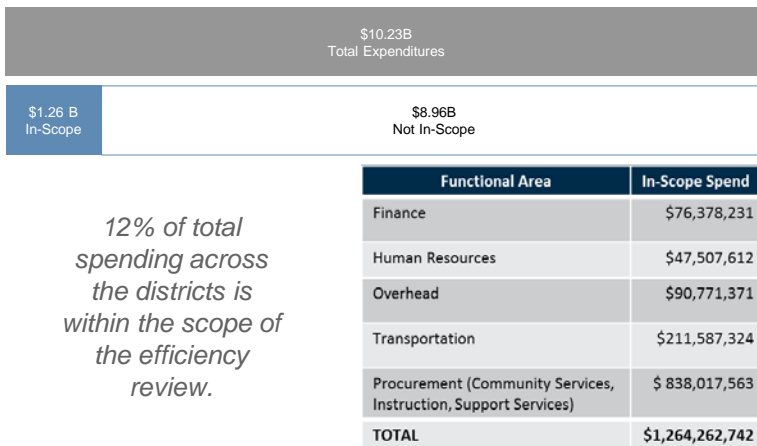
Number of Districts by Enrollment Level



Enrollment

Enrollment Groups	# of Districts	2015	2017	% Change
< 2,500	20	27,336	26,543	-2.9%
2,500 - 5,000	21	73,050	71,589	-2.0%
Subtotal	41	100,386	98,131	-2.2%
5,000 - 10,000	17	131,920	132,020	0.1%
10,000 - 15,000	5	57,725	60,506	4.8%
15,000 - 20,000	5	81,771	82,052	0.3%
Subtotal	27	271,417	274,579	1.2%
20,000 - 40,000	7	174,024	178,113	2.3%
> 40,000	3	159,196	164,249	3.2%
SC Public Charter Schools	1	17,066	21,280	24.7%
Subtotal	11	350,286	363,641	3.8%
Total	79	722,089	736,351	2.0%

Spending within Scope of Efficiency Review



Key Takeaways

- 52% of the districts under review are small districts (enrollment under 5,000 students) and serve only 13% of the student population.
- Enrollment in the districts under 5,000 has declined by 2.2% since 2015 while statewide enrollment is growing 2%.
- The top 11 districts serve 49% of the students in the State.
- The functional areas under review for efficiencies represent 12% of the total spend in all districts, with procurement making up the majority of this total.

SCHOOL DISTRICT EFFICIENCY REVIEW

COMMON OBSERVATIONS ACROSS DISTRICTS

	Current State
District Size	<ul style="list-style-type: none"> • High Fixed Costs: Many small districts face challenges borne out of a combination of inherent inefficiencies that come from the lack of scale needed to support fixed costs and inadequate technology and processes. • Economies of Scale: Larger districts generally benefit from increased efficiencies and effectiveness due to size. However, there is still opportunity to implement new technologies and streamline processes.
Staffing (within HR and Finance)	<ul style="list-style-type: none"> • Staffing Environments: The larger districts often have long tenured staff and maintaining low turnover in these departments. This stability resulted in more consistent processes, better trained staff, and overall increased effectiveness of the teams. Whereas, the smaller, poorer districts often are noted for the limited staffing, manual processes, and under-investment and under-utilization of technology which frequently contribute to high numbers of internal control weaknesses and gaps in financial processes in those districts.
Financial Viability	<ul style="list-style-type: none"> • Unrestricted Fund Balance: The statewide average unrestricted fund balance is 18.6%. A review of the unrestricted fund balances indicate that the smallest districts are more likely to have dangerously low balances (i.e., below 8%) or excessively high balances (i.e., above 25%) indicating poor cash management procedures for the smallest districts (i.e., less than 5,000 students). <ul style="list-style-type: none"> • 12 districts have a fund balance less than 8%, 7 of which have enrollment less than 5,000 students • 28 districts have a fund balance between 8 - 18.6%, 10 of which have enrollment less than 5,000 students • 22 districts have a fund balance between 18.6 - 25%, 9 of which have enrollment less than 5,000 students • 17 districts have a fund balance greater than 25%, 14 of which have enrollment less than 5,000 students

SCHOOL DISTRICT EFFICIENCY REVIEW

COMMON OBSERVATIONS: INDIVIDUAL SCOPE AREAS

	Current State
Financial Management	<ul style="list-style-type: none">• Gaps in Financial Management: In many smaller districts, staffing levels and processes contribute to material weaknesses in internal controls. In the past two years:<ul style="list-style-type: none">• 8 of 10 districts with Material Weaknesses had less than 5,000 students• 5 of 6 districts with significant deficiencies had less than 5,000 students• 15 of 23 districts with other findings noted in their audit reports had less than 5,000 students• 1 District was in financial distress three years ago and now has a financial monitor• 1 District is being managed by the state was precipitated by both poor financial and student performance
Teacher Recruiting and Retention	<ul style="list-style-type: none">• Moderate Staffing in Larger Districts: All districts in South Carolina experience challenges recruiting and retaining teachers due to the overall national teacher shortage.<ul style="list-style-type: none">• However, small, poor and rural districts experience material teacher shortages. These districts rely on organizations such as Teach For America (TFA) and also use international teachers to fill critical teaching vacancies.• Slightly wealthier and larger districts are generally able to pay higher salaries than other districts, helping to alleviate slightly the teacher shortage.
Transportation	<ul style="list-style-type: none">• Transportation Management: The majority of large and small districts continue to struggle with bus driver shortages. Districts have increased pay and offered dual employment opportunities, however, shortages still remain.• Manual Routing: Generally, smaller districts continue to set student transportation routes manually, while larger districts leverage routing software to establish the most efficient route. In addition, large districts also use staggered start times helping to increase the number of routes a bus runs each day.

SCHOOL DISTRICT EFFICIENCY REVIEW

COMMON OBSERVATIONS: INDIVIDUAL SCOPE AREAS

	Current State
Procurement	<ul style="list-style-type: none">• Collaborative Purchasing: Generally, purchasing is district specific with minimal collaboration across groups of districts to drive volume discounts and limited standardization in purchasing across districts (i.e., districts do not fully leverage purchasing power)• Savings Opportunities: Districts of all size would benefit from collaboration with other districts in purchasing
Overhead	<ul style="list-style-type: none">• Staffing and Organization: In many of the smaller districts, the central office staffing support is typically streamlined due to budgetary constrains leaving limited room for communications support, central instructional support, student services, or more advanced capabilities such as data analytics or analysis of testing and accountability results.• Collaboration: Varying levels of informal collaboration with other Superintendents based on existing relationships, the availability of consortiums, or the degree of participation in the SCBA working groups.

RECOMMENDATIONS

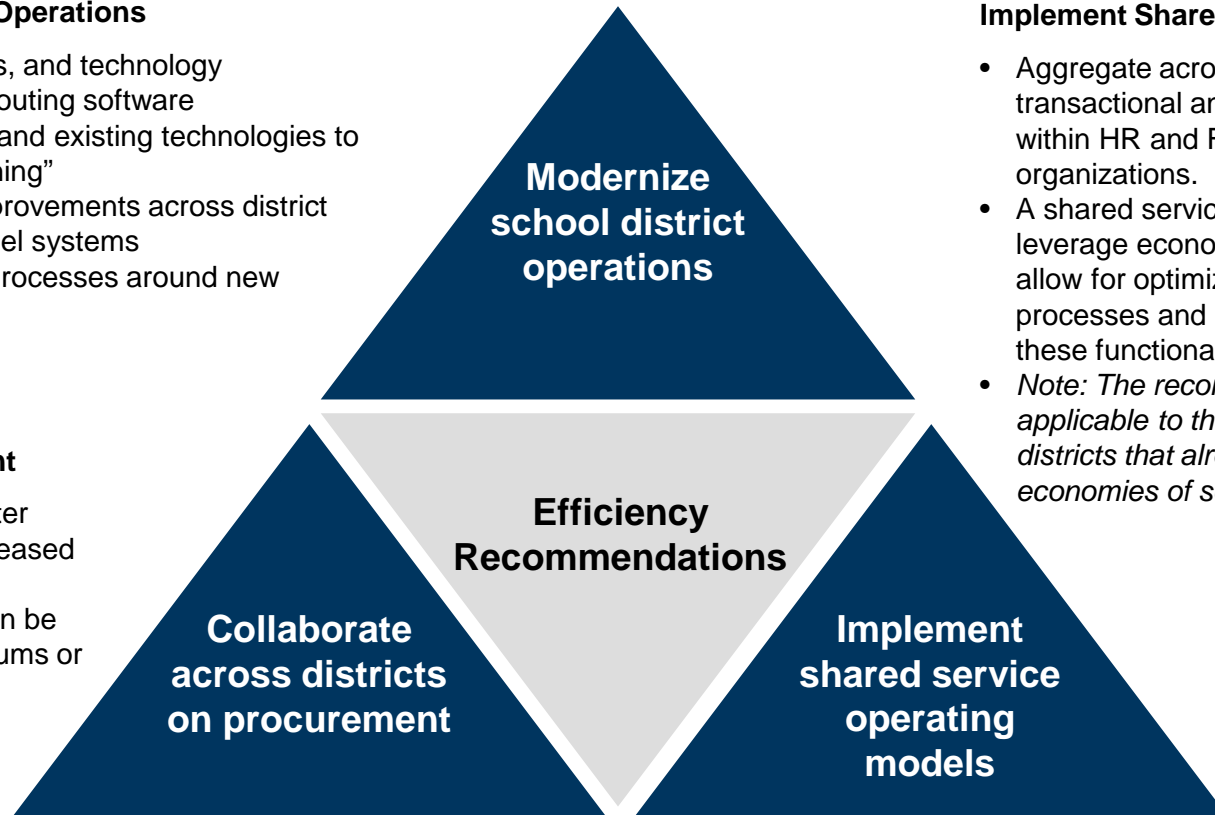
School Districts' efficiencies identified during the review can best be summarized into three key categories: Modernize, Collaborate, and Shared Services

Modernize School District Operations

- Invest in people, process, and technology
 - ✓ New state-wide bus routing software
 - ✓ Purchase new or expand existing technologies to minimize “paper-pushing”
 - ✓ Drive data quality improvements across district financial and personnel systems
- Streamline people and processes around new technology

Collaborate on Procurement

- Districts can achieve greater buying power through increased procurement coordination.
- Increased collaboration can be achieved through consortiums or shared service models.



Implement Shared Service Model

- Aggregate across districts the transactional and common activities within HR and Finance into regional organizations.
- A shared service model will leverage economies of scale and allow for optimization of businesses processes and improved quality in these functional areas.
- *Note: The recommendation is not applicable to the seven largest districts that already benefit from economies of scale.*

SCHOOL DISTRICT EFFICIENCY REVIEW

MODERNIZATION RECOMMENDATIONS

All Districts will benefit from some investment in people, process, and technology to improve the efficiency and effectiveness of the district's overall processes and operations.

MODERNIZATION RECOMMENDATIONS			
FINANCE	HUMAN RESOURCES	PROCUREMENT	TRANSPORTATION
<p>System Enhancements: Update software versions and / or add modules to financial systems to facilitate automated and purchase to payments processes, integrated timekeeping and payroll and position control functionality.</p> <p>Process Improvements: Modernize processes to limit manual activities and strengthen internal controls</p> <p>Staffing/Organization: Train/cross-train personnel on key financial functions to increase the capabilities and effectiveness of the teams.</p>	<p>System Enhancements: Implement new technologies to automate HR processes such as integrated applicant sourcing, tracking and on-boarding.</p> <p>Process Improvements: Formalize plans to implement and enhance incentive programs to help navigate teaching shortages and increase recruitment and retention rates.</p> <p>Staffing and Organization: Train/cross-train personnel on recruiting, talent management and professional development strategies.</p>	<p>Process Improvements: Leverage state contracts and group purchasing organizations to optimize spend.</p> <p>Enable other districts to purchase off individually negotiated contracts.</p> <p>Negotiate discounts / rebates for tiered levels of spending using minimum buying commitments as appropriate.</p> <p>Monitor compliance with major contracts and analyze spending distribution on an ongoing basis to identify opportunities for potential savings</p>	<p>System Enhancements: Implement new routing software, GPS, and security cameras on all buses.</p> <p>Process Improvements: Staggered Bell Times: - Complete analysis (in conjunction with use of routing software) to evaluate potential financial benefits of using routing software.</p> <p>Staffing / Organization: Implement staggered bell times and routing software to make routes more efficient and reduce the number of bus drivers necessary for operation.</p>

SCHOOL DISTRICT EFFICIENCY REVIEW

COLLABORATION RECOMMENDATIONS

Organizational effectiveness and cost savings opportunities can increase through formal collaboration efforts between districts.

REGIONAL SHARED SERVICES OPPORTUNITIES**			COLLABORATION
FINANCE	HUMAN RESOURCES	OTHER AREAS	PROCUREMENT
<p>Accounts Payable and Payroll: Shared Processing; Standardized and automated workflow on approvals</p> <p>Potential to add in:</p> <ul style="list-style-type: none"> Accounting Entries Financial Reporting General Oversight ERP Systems Grant Compliance and Claiming 	<p>Benefits Coordination: Shared Processing and Support</p> <p>Potential to add in:</p> <ul style="list-style-type: none"> Intl. Recruiting: H1B Process or collaborative System Licenses for Recruiting, Substitute Management, and on-boarding Sharing of instructional resources across varying classroom models 	<p>Transportation: Sharing of administrative resources</p> <p>Facilities/ Maintenance: Shared staffing of key maintenance positions across districts (e.g, HVAC, Electrician, Plumbing)</p> <p>Technology: Shared oversight and support functions</p> <p>Curriculum: Shared research and development functions</p>	<p>Purchasing Coordination: Collaborate on market intelligence, pricing opportunities, RFP management, contract negotiations, contract management and minimum buying commitments.</p> <p>Capitalize on volume discounts and rebates.</p> <p>Shared analysis of spending, monitoring and optimization of pricing.</p>

Governance structures, service level agreements and implementation plans will vary based upon the range of services included and the districts participating in a collaborative model.

**Collaboration in Finance and HR is recommended for all but the seven largest districts

SCHOOL DISTRICT EFFICIENCY REVIEW

CONCLUSION: ESTIMATED ONE-TIME INVESTMENT AND ANNUAL SAVINGS

Aggregate one-time investment and annual savings estimates for all 79 districts reviewed are shown below.

	MODERNIZE		COLLABORATE	
	Est. One-Time Investment		Est. Net Annual Savings	
	Low	High	Low	High
Finance	\$2,000,000	\$4,400,000	\$3,800,000 -	\$13,500,000
Human Resources	500,000 -	1,200,000	0 -	2,800,000
Procurement	0 -	0	16,200,000 -	42,300,000
Transportation – Districts	0 -	0	3,000,000 -	4,700,000
District Total	2,500,000	5,600,000	23,000,000	63,300,000
Transportation – State	1,000,000 -	4,200,000	2,900,000 -	6,300,000
Total	3,500,000 -	\$9,800,000	\$25,900,000 -	\$69,600,000

Investment and savings ranges shown above reflect preliminary estimates of impacts of A&M recommendations. These amounts are subject to change based upon the implementation strategies selected. In addition, potential costs associated with additional planning activities are not reflected in these estimates.

SCHOOL DISTRICT EFFICIENCY REVIEW

CONCLUSION: ESTIMATED FIVE YEAR IMPACT

The potential five year impact of investment and savings estimates for the 79 districts reviewed in the efficiency study are shown below.

Actual savings amounts realized during the five year period will be subject to how quickly initiatives are implemented and implementation strategies selected.

	Estimated 5 Year Impact	
	Low	High
Savings by Area		
Finance	\$19,000,000	\$67,500,000
Human Resources	0	14,000,000
Procurement	81,000,000	211,500,000
Transportation – Districts	15,000,000	23,500,000
District Total	115,000,000	316,500,000
Transportation – State	14,500,000	31,500,000
Total Savings Before Investment	\$129,500,000	\$348,000,000
District Modernization Costs	<u>(2,500,000)</u>	<u>(5,600,000)</u>
Incremental State Costs	<u>(1,000,000)</u>	<u>(4,200,000)</u>
Net Savings	<u>\$126,000,000</u>	<u>\$338,200,000</u>

APPENDIX – SC SCHOOL DISTRICT EFFICIENCY REVIEW



SCHOOL DISTRICT EFFICIENCY REVIEW

APPROACH TO SAVINGS

GENERAL APPROACH TO ESTIMATING INVESTMENTS AND SAVINGS

- Investments and cost savings were estimated based on interviews with District personnel across each functional area and using financial and operational data received from both the state and each district.
- Data provided was benchmarked and analyzed to understand costs, productivity and utilization.
- Actual savings may vary based on implementation decisions.

FINANCE AND HUMAN RESOURCES

- A&M conducted interviews and analyzed personnel rosters and expenses to understand the intersection of people, process and technology within each district.
- A&M estimated a range of potential synergies from district collaboration based on average district spend in key finance and HR functional areas. Synergies will be realized when participating district resources are pooled in a Shared Service Center. For purposes of this analysis, A&M calculated the District level savings by estimating the level of resources that would be required to support two average sized smaller districts at the low end and five districts of varying sizes at the high end. The estimate of savings ranged from 10-30% for finance and HR based on this methodology.**

PROCUREMENT

- A&M reviewed Districts' disbursement registers and reviewed a limited sampling of vendor invoices to gain an understanding of their procurement spend.
- On a limited basis, A&M reviewed rates paid to individual vendors by multiple districts.
- In order to estimate savings, A&M leveraged the information gathered above and then applied potential savings rates to key spend categories. Savings rates were based upon past experience that our clients have achieved by partnering with A&M on strategic sourcing.

TRANSPORTATION

- A&M used data provided by the state to analyze each districts' route mileage, frequency, timing, and volume to estimate potential efficiencies available through the implementation of routing software and staggered bell times.
- Benchmarks were established based on districts currently using routing software and staggered bell times.
- Savings were estimated based on a target benchmark for the District that took into consideration the location, population and rural profile of the each district.
- Estimates include savings for bus drivers, fuel, maintenance and buses.

**Collaboration in Finance and HR is recommended for all but the seven largest districts

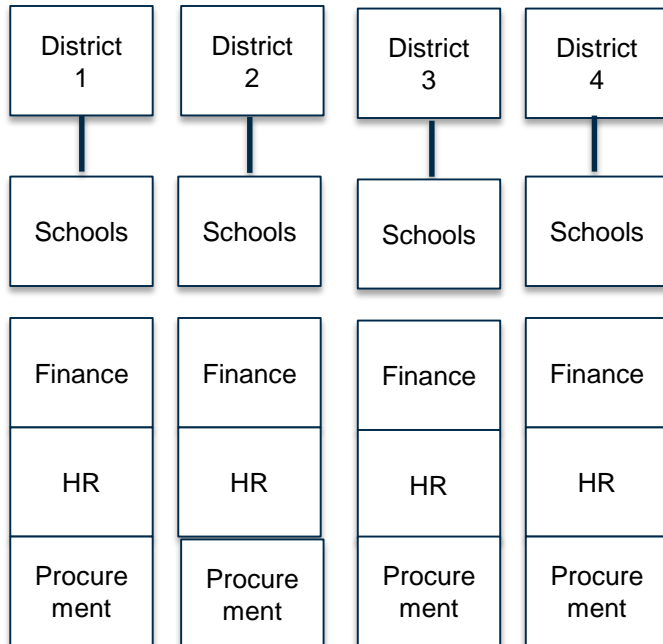
SCHOOL DISTRICT EFFICIENCY REVIEW

COLLABORATION: SHARED SERVICE MODELS

Given the limited spending across the different areas within scope and the fixed cost requirements of these functions, it is necessary to consider collaboration alternatives when looking for ways to optimize efficiency.

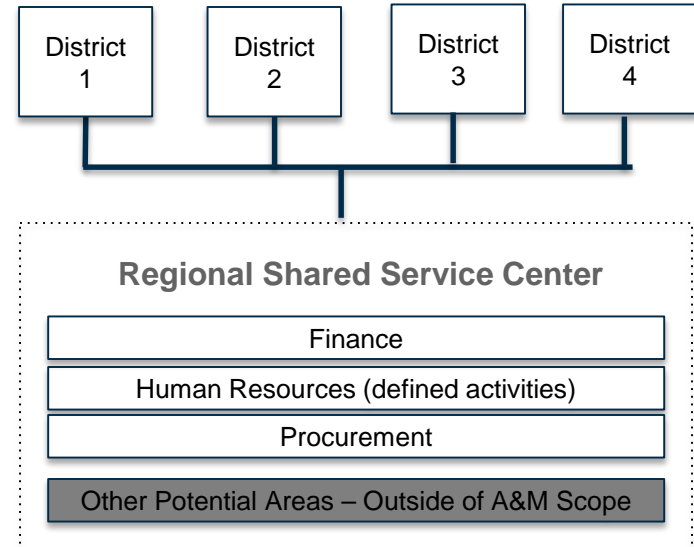
CURRENT STATE: STAND ALONE DISTRICT

Infrastructure for transactional processes repeated in individual districts; limited economies of scale



COLLABORATION ALTERNATIVE

Shared expertise, improved controls, leverages scale to reduce aggregate costs and enhance efficiency



Collaboration provides a pathway to optimizing effectiveness and efficiencies across processes, capturing economies of scale, increasing standardization and addressing common challenges faced by all districts.

**Collaboration in Finance and HR is recommended for all but the seven largest districts

SCHOOL DISTRICT EFFICIENCY REVIEW

SHARED SERVICES MODEL: SAVINGS APPROACH

Cost savings potential from a Shared Services Model will vary greatly depending upon: (1) the number of districts; (2) sizes of districts opting to work together and (3) the services functions that are included in the shared services center.

In order to develop a range of savings that a collaboration model would yield, A&M considered collaborations of multiple types and amounts of districts. An example of the range of options considered for financial management collaboration is shown below.

Financial Management Collaboration: Two District Collaboration [Both Small]			
	Current State	Collaboration Model	Savings
# of Districts	2	2	NA
Total ADM	2,500	2,500	NA
Total FTEs⁽¹⁾	4.75	4.00	0.75
Total Spend⁽¹⁾	\$468,856	\$427,128	\$41,728
Savings %			8.9%

(1) Total FTEs and Total Spend based upon average FTEs of average spend of two small districts (less than 2,500 enrollment). Actual results may vary depending upon districts opting to collaborate.

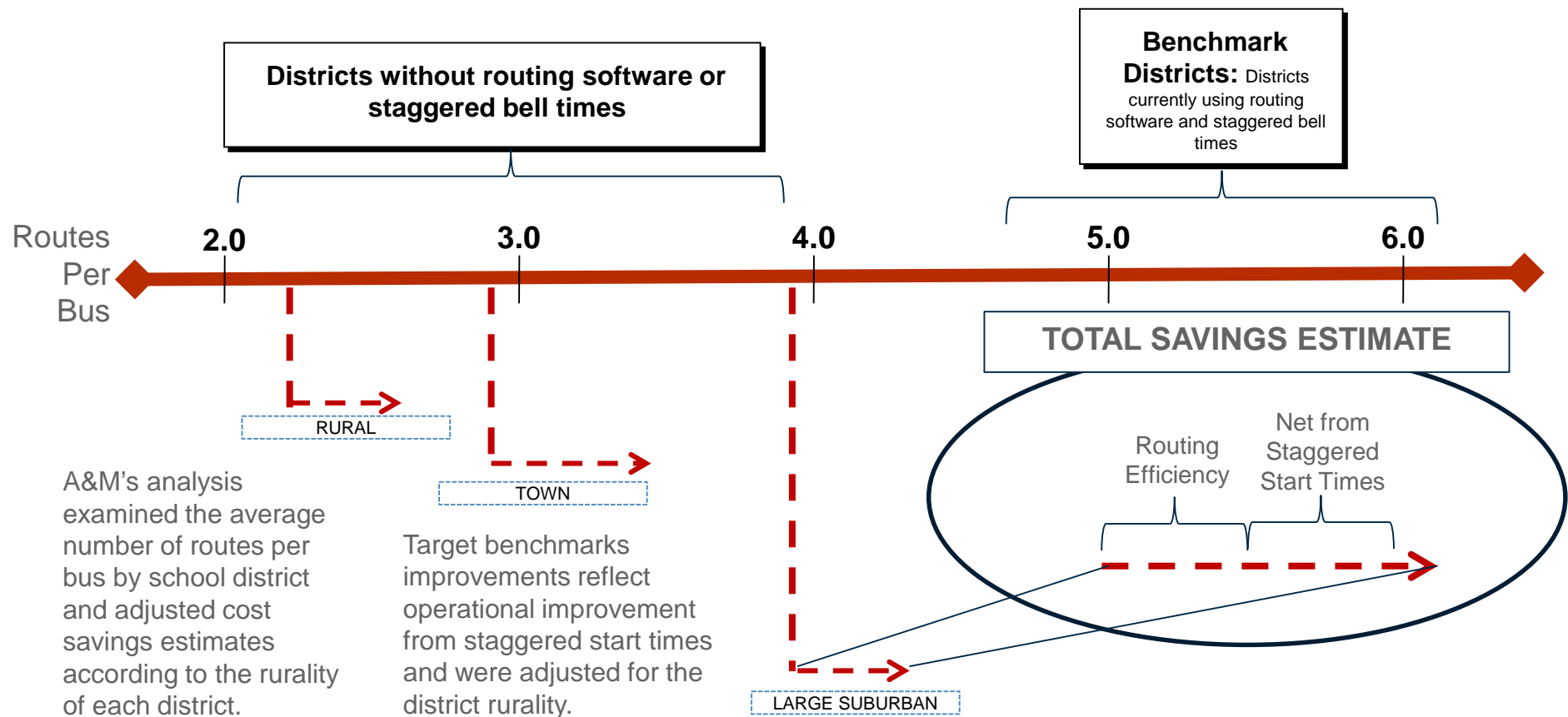
Financial Management Collaboration Five Districts [1 Large, 1 Med, 3 Small]			
	Current State	Collaboration Model	Savings
# of Districts	5	5	NA
Total ADM	21,000	21,000	NA
Total FTEs⁽²⁾	18.9	13.0	6.0
Total Spend⁽²⁾	\$2,409,840	\$1,684,478	\$725,326
Savings %			30.1%

(2) Total FTEs and Total Spend based upon average FTEs and average spend of one large district (>10,000 ADM), one medium district (between 5,000 and 10,000 ADM) and 3 small districts (less than 2,500 enrollment)

Preliminary estimates, excluding costs of one time investments related to technology and organizational changes, of potential savings from collaboration of financial management functions across districts range from 8.9% to 30.1%.

TRANSPORTATION ROUTING: SAVINGS APPROACH

Implementation of new routing software can help districts optimize existing routes and evaluate alternative routing strategies such as staggered bell times.



SCHOOL DISTRICT EFFICIENCY REVIEW

TRANSPORTATION ROUTING: SAVINGS APPROACH (CONTINUED)

Savings from Routing Efficiencies

A&M analyzed districts' route mileage, frequency, timing, and volume to estimate potential efficiencies available through the implementation of routing software.

This analysis separates the district and state portions of estimated cost savings according to the amount of reimbursement the state provides to each district.

Fuel and maintenance savings are based on state cost per vehicle mile.

The reduction in buses is the result of a reduction in the need to purchase new buses per year across the plaintiff districts. It is important to note that variances in population growth across the state could impact the estimated reduction in fleet vehicles needed.

DISTRICT EXAMPLE OF COST SAVINGS OPPORTUNITIES FROM ROUTING SOFTWARE

DISTRICT A	VOLUME	UNIT	DISTRICT	STATE
DRIVERS	5.0	\$ 19,390	\$ 55,051	\$ 37,238
FUEL	43,560	\$ 0.15	\$ -	\$ 6,749
MAINTENANCE	43,560	\$ 0.34	\$ -	\$ 14,595
BUSES (COST AVOIDANCE)	1.0	\$ 60,000	\$ -	\$ 60,000
TOTAL			\$ 55,051	\$ 118,582

Cost savings from more efficient routing are significant, with savings shared between the districts and the State.

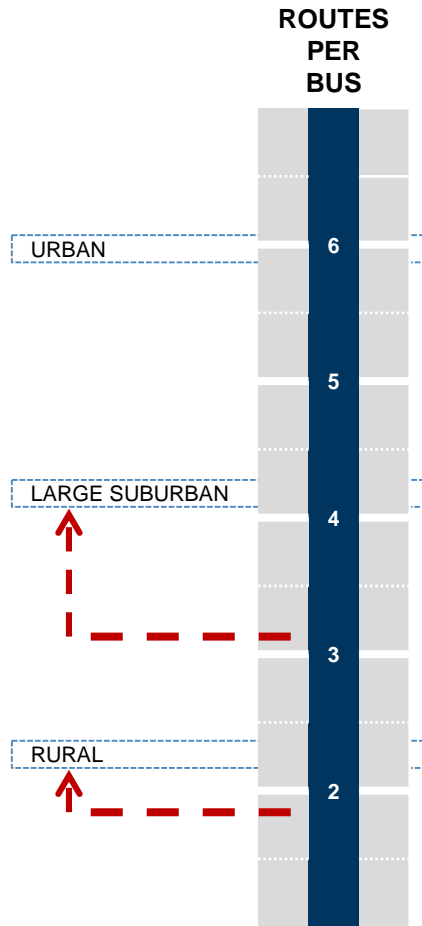
SCHOOL DISTRICT EFFICIENCY REVIEW

TRANSPORTATION ROUTING: SAVINGS APPROACH (CONTINUED)

Savings from Increased Utilization:

A&M's analysis examined the average number of routes per bus by school district and adjusted cost savings estimates according to the rurality of each district.

Target benchmark improvements are shown in the graphic to the right reflecting operational improvement and adjusting for the district rurality.



DISTRICT EXAMPLE COST SAVINGS OPPORTUNITIES FROM STAGGERED SCHOOL START TIMES

DISTRICT A	VOLUME	UNIT	DISTRICT	STATE
DRIVERS	2.0	\$ 19,390	\$ 23,133	\$ 15,647
FUEL	-	\$ 0.15	\$ -	\$ -
MAINTENANCE	2.0	\$ 4,138	\$ -	\$ 8,276
BUSES (COST AVOIDANCE)	-	\$ 60,000	\$ -	\$ -
TOTAL			\$ 23,133	\$ 23,923

Staggered bell times would help reduce routes and the number of buses required.

SCHOOL DISTRICT EFFICIENCY REVIEW

COLLABORATION: PURCHASING COORDINATION AND AGGREGATION

Given the size of many of the individual districts, there is little leverage to negotiate best pricing or invest in resources needed to develop or implement a defined procurement strategy. These districts would benefit from greater purchasing coordination, aggregation of buying power and minimum commitments in order to improve overall pricing.

Additionally, all districts would benefit from taking a more strategic approach in handling procurements and managing supplier contracts. This could be handled through a statewide cooperative purchasing program with representation from the State, Districts, and potentially Higher Education institutions to identify and jointly pursue specific sourcing categories.

EXAMPLES OF STATE-WIDE PROCUREMENT OPPORTUNITIES

Example 1: Differentiated Pricing in Professional Services

District	Labor Rate Mark-up for Temporary Staff
District A	0.43 to 0.49
State Contract	0.40
District B	0.39

- At a minimum, many districts could benefit from leveraging State contracts. Districts could additionally benefit from favorable pricing negotiated by other districts.

Example 2: Volume Discounts and Rebates with a Technology Vendor

Minimum \$ Value	Discount
\$50,000	1%
\$100,000	2%
\$200,000	4%
\$500,000	6%
\$1,000,000	8%

- Nearly all districts could benefit from additional discounts by aggregating spend statewide.

SCHOOL DISTRICT EFFICIENCY REVIEW

PURCHASING COORDINATION AND AGGREGATION: SAVINGS APPROACH

In order to develop a range of savings that a purchasing consortium would yield, A&M estimated savings based on current district spend and applied savings ranges based on the experience that our clients have achieved by partnering with A&M on strategic sourcing.

To determine actual savings amounts by District, A&M applied the savings ranges to FY16 expenditure data from the state. The expenditure data from the State is summarized at function and major object codes.

Given the approach to estimate savings was a top-down approach rather than a bottom-up approach of savings by vendor, the estimates of savings achieved through purchasing coordination are high-level estimates.

	Range of Savings Based A&M Strategic Sourcing Experience	
	Low	High
Building Services	2.6%	5.8%
Non-Instructional Supplies	2.0%	4.4%
Instructional Supplies	2.0%	4.4%
Instructional Services	4.8%	8.0%
Support Services	2.1%	5.0%
Technology	2.7%	5.0%
Other	3.0%	5.8%
Overhead Services	2.7%	5.4%
Transportation Services	2.2%	6.8%

Preliminary estimates of potential savings from increased collaboration of purchasing across districts range from 2.0% to 8.0% for smaller districts depending on category of spend. The savings estimates were reduced to 1.0% to 5.0% for the largest districts due to the greater scale and more rigorous processes that were observed.