STANDARD &POOR'S

School Evaluation Services



Kansas School District Efficiency Study

Part IIa: School District Efficiency Profiles

Presented alphabetically (school districts A-F)

Commissioned by

Governor Kathleen Sebelius Ewing Marion Kauffman Foundation April, 2007

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OVERVIEW OF THE KANSAS SCHOOL DISTRICT EFFICIENCY STUDY

Governor Kathleen Sebelius and the Ewing Marion Kauffman Foundation have commissioned Standard & Poor's School Evaluation Services to conduct an Educational Efficiency Study of the state's school districts. The overarching objective of the project is to help Kansas better understand which districts are utilizing their resources most efficiently and how less efficient districts may benchmark themselves against these districts to identify improvement opportunities.

Specific objectives of the study include the following:

- Efficiency Measurement provide a relative efficiency measurement system to assess school districts' effective use of resources. Specifically, this study provides relative efficiency scores for individual districts and identifies those districts that are particularly effective in using their financial resources to optimize student learning (i.e., highly efficient districts). The relative efficiency of each school district is scored on a scale from 0% - 100%. Part I of the study (a separate document) focuses on this objective.
- 2. Efficiency Improvement in conjunction with the measurement system, provide information to foster the more efficient use of resources, particularly to raise student achievement. Specifically, this study provides the less efficient districts with improvement targets and benchmarks derived from highly efficient districts to which they can compare themselves a process that can lead to the identification of potential improvement opportunities. This section (Part II) of the study focuses on this objective.

GUIDE TO DISTRICT EFFICIENCY PROFILES

Layout of Efficiency Profiles

The remainder of this section of the Kansas School District Efficiency Study is a series of twopage profiles for the districts in the state that are not on the **efficient frontier**. The purpose of these profiles is to provide each district with a brief summary of its current relative efficiency, as well as benchmarks from the efficient frontier districts that may be able to provide a window into "best practices" and potential improvement targets.

The profiles include the following:

- the district's **relative efficiency score** and **output targets** that, had they been achieved, would have placed the district on the **efficient frontier** (i.e., would have resulted in a relative efficiency score of 100%),
- a **brief guide** to understanding the data and analytical method used to determine the score,
- a list of the 21 efficient frontier districts across the state,
- a **side-by-side comparison** with up to two districts from the **efficient frontier** that appear to be particularly useful benchmarks for the district as it explores ways to improve its outputs and, ultimately, its efficiency.

Important Data and Method Notes

Data Sources

All data used in this study – student performance, enrollment characteristics, and spending – were obtained from the Kansas Department of Education.

Data Calculations

To perform the efficiency analysis, all data have been converted into weighted averages of the districts' 2004-05 and 2005-06 school years, with the most recent year (2005-06) weighted twice as heavily as the least recent year (2004-05). The averaging has been done to mitigate potential problems with data volatility due to small populations and measurement error, while recognizing that the most recent performance should be an important reflection of the districts' most recent efforts.

Definition of Outputs and Inputs

Proficiency Rate is an overall indicator created by Standard & Poor's to measure success in meeting state standards in reading and math. The proficiency rate is calculated by summing the total number of reading and math tests systemwide (grades 3-8 and high school) that scored at the "meeting standard" level or better, and dividing by the total number of tests.

Performance Index is an overall indicator created by Standard & Poor's to go beyond measuring proficiency and award points on a sliding scale for every test score that reaches at least the "approaches standard" level, with more points given for higher performance levels. The performance index is calculated by summing the total number of reading and math tests systemwide that score in each of the four highest performance levels, with additional weight placed on each higher level, and dividing by total possible number of points. Index points are awarded as follows (out of a maximum 4.0 points): 0.5 points for all scores that are "approaching standard"; 1.0 points for "meeting standard"; 1.5 points for "exceeding standard"; and 2.0 points for "exemplary" scores.

Performance Level Academic Warning	<u>Index Points</u> 0	Effective Weight <u>in Index</u> 0%
Approaching Standard	0.5	10%
Meeting Standard Exceeding Standard	1.0 1.5	20% 30%
Exemplary	2.0	40%
Possible Points	4.0	100%

Core Spending is comprised of a subset of "core" district spending functions that are largely comparable from district to district and most directly tied to efforts to improve student learning. These include expenditures for instruction, instructional staff support, pupil support, general administration, school administration, and operations and maintenance. (Spending for transportation, food services, and enterprise operations are excluded because of variation between districts, often due to reasons outside of district control, while non-operating activities like capital outlays and debt service are excluded both because of variation between districts and

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also within the same district from one year to the next). Since the purchasing power of the dollar varies from one region to another across the state, this study uses the Comparable Wage Index from the National Center for Education Statistics to "normalize" each school district's expenditure data, making spending levels more comparable.

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School District Efficiency Profiles

Kansas School District Efficiency Study

District: Abilene (D0435)

Why was this profile produced?

Governor Sebelius and the Ewing Marion Kauffman Foundation commissioned Standard & Poor's to study the relative efficiency of the state's school districts. A key component of the study is this two-page profile, produced for each of the state's less efficient school districts to provide them with a resource to help in their efforts to become more efficient.

What is a relative efficiency score? What does this district's score mean?

The relative efficiency score is derived by examining the relationship between three variables: **inputs** – how much the district spends per pupil; **outputs** – how well the district's students perform in reading and math; and **constraints** – how many of the district's students have special needs (i.e., economically disadvantaged backgrounds, physical or learning disabilities, or limited English proficiency), which are common factors that are outside of a district's control but can affect its spending and achievement levels.

Using linear mathematics, the district's data are then compared to all other school districts in the state to determine its relative efficiency score. Districts with the highest ratio of outputs to inputs in light of their constraints are considered to be on the efficiency frontier, and receive relative efficiency scores of 100%. Accordingly, they are referred to as **efficient frontier** districts. This district's score means that it is **84.15%** as efficient as the state's most efficient districts, taking into account its particular combination of inputs, outputs, and constraints.

This District's **Relative Efficiency Score** = 84.15%

How could this district improve its efficiency score? As noted above, this district has produced less than 100% of the outputs that might have been expected for its level of inputs and constraints, based on the performance of other districts. Had the district been able to increase its outputs to the target values shown in the accompanying table, while maintaining its current level of inputs, it would have reached the **efficient frontier**.

Output Improvement Targets

Outputs	Actual Value	Target Value*
Proficiency Rate	74.9%	89.0%
Performance Index	46.1%	58.0%

*Had this district achieved the target values, it would have received a 100% relative efficiency score.

Which data are included in the calculation of the district's efficiency score?

Inputs

Core Spending
 (\$ per student spent on core day-to-day operations,

adjusted for local differences in purchasing power)

<u>Constraints</u> (factors outside of the district's control)

- Enrollment of Economically Disadvantaged Students
- Enrollment of English Language Learners
- Enrollment of Students with Disabilities

- Reading and Math Proficiency Rate (percent of reading and math tests scoring at the "proficient" standard or higher)
- Reading and Math Performance Index (an index that goes beyond measuring proficiency by awarding points for all tests that score above the lowest level – "basic", "proficient", "advanced", and "exemplary" – with higher scores awarded more points than lower scores)

Kansas School District Efficiency Study

District: Abilene (D0435)

Region: North Central Kansas (Dickinson County)

Which Kansas districts are the most efficient?

A total of 21 districts across the state have been identified as **efficient frontier** districts (achieving relative efficiency scores of 100%); these are listed alphabetically in the following table. One (or more) of these districts may serve as the source of promising practices that might be replicated in order to improve this district's performance.

District	County	District	<u>County</u>	District	County
Arkansas City	Cowley	Dodge City	Ford	Lyons	Rice
Ashland	Clark	Gardner-Edgerton	Johnson	Newton	Harvey
Baldwin City	Douglas	Great Bend	Barton	Osawatomie	Miami
Brown County	Brown	Halstead	Harvey	Rolla	Morton
Burlingame	Osage	Kismet-Plains	Seward	Shawnee Mission	Johnson
Deerfield	Kearny	Lansing	Leavenworth	Waconda	Mitchell
DeSoto	Johnson	Leoti	Wichita	West Elk	Elk

How does this district compare to the state's most efficient districts?

The following table compares Abilene with two of the state's **efficient frontier** districts using two different criteria. The first comparison is made to the efficient frontier district with the most similar demographic constraints to this district. The second comparison is made to a similarly-sized efficient frontier district that spends no more than this district and produces the highest overall student performance.

		Most Similar	Best-Performing
Indicator	This District	Frontier District*	Frontier District**
District Name	Abilene	Osawatomie	Gardner-Edgerton
District Code	D0435	D0367	D0231
County	Dickinson	Miami	Johnson
Enrollment	1,539	1,235	3,782
Constraints	,	,	,
Economically Disadvantaged Students	35.9%	50.8%	21.5%
English Language Learners	0.8%	0.0%	0.9%
Students with Disabilities	15.5%	15.3%	12.2%
Inputs			
Core Spending (per student)	\$7,224	\$6,193	\$5,565
Outputs			
Reading and Math Proficiency Rate	74.9%	75.5%	89.0%
Reading (grades 3-8)	77.8%	78.5%	88.9%
Reading (high school)	73.9%	78.4%	87.6%
Math (grades 3-8)	76.3%	81.4%	92.0%
Math (high school)	65.7%	39.7%	78.7%
Reading and Math Performance Index	46.1%	45.7%	61.5%
Reading (grades 3-8)	46.9%	48.0%	59.6%
Reading (high school)	42.4%	43.0%	63.8%
Math (grades 3-8)	48.5%	50.1%	65.9%
Math (high school)	43.7%	22.0%	50.3%

* Efficient frontier district with most similar constraints as this district.

Kansas School District Efficiency Study

District: Alma (D0329)

Region: Northeast Kansas (Wabaunsee County)

Why was this profile produced?

Governor Sebelius and the Ewing Marion Kauffman Foundation commissioned Standard & Poor's to study the relative efficiency of the state's school districts. A key component of the study is this two-page profile, produced for each of the state's less efficient school districts to provide them with a resource to help in their efforts to become more efficient.

What is a relative efficiency score? What does this district's score mean?

The relative efficiency score is derived by examining the relationship between three variables: **inputs** – how much the district spends per pupil; **outputs** – how well the district's students perform in reading and math; and **constraints** – how many of the district's students have special needs (i.e., economically disadvantaged backgrounds, physical or learning disabilities, or limited English proficiency), which are common factors that are outside of a district's control but can affect its spending and achievement levels.

Using linear mathematics, the district's data are then compared to all other school districts in the state to determine its relative efficiency score. Districts with the highest ratio of outputs to inputs in light of their constraints are considered to be on the efficiency frontier, and receive relative efficiency scores of 100%. Accordingly, they are referred to as **efficient frontier** districts. This district's score means that it is **85.85%** as efficient as the state's most efficient districts, taking into account its particular combination of inputs, outputs, and constraints.

This District's **Relative Efficiency Score** = 85.85%

How could this district improve its efficiency score? As noted above, this district has produced less than 100% of the outputs that might have been expected for its level of inputs and constraints, based on the performance of other districts. Had the district been able to increase its outputs to the target values shown in the accompanying table, while maintaining its current level of inputs, it would have reached the **efficient frontier**.

Output Improvement Targets

Outputs	Actual Value	Target Value*
Proficiency Rate	78.8%	91.8%
Performance Index	49.9%	58.1%

*Had this district achieved the target values, it would have received a 100% relative efficiency score.

Which data are included in the calculation of the district's efficiency score?

Inputs

Core Spending

 (\$ per student spent on core

(\$ per student spent on core day-to-day operations, adjusted for local differences in purchasing power)

<u>Constraints</u> (factors outside of the district's control)

- Enrollment of Economically Disadvantaged Students
- Enrollment of English Language Learners
- Enrollment of Students with Disabilities

- **Reading and Math Proficiency Rate** (percent of reading and math tests scoring at the "proficient" standard or higher)
- Reading and Math Performance Index (an index that goes beyond measuring proficiency by awarding points for all tests that score above the lowest level – "basic", "proficient", "advanced", and "exemplary" – with higher scores awarded more points than lower scores)

Kansas School District Efficiency Study

District: Alma (D0329)

Region: Northeast Kansas (Wabaunsee County)

Which Kansas districts are the most efficient?

A total of 21 districts across the state have been identified as **efficient frontier** districts (achieving relative efficiency scores of 100%); these are listed alphabetically in the following table. One (or more) of these districts may serve as the source of promising practices that might be replicated in order to improve this district's performance.

District	County	District	<u>County</u>	District	County
Arkansas City	Cowley	Dodge City	Ford	Lyons	Rice
Ashland	Clark	Gardner-Edgerton	Johnson	Newton	Harvey
Baldwin City	Douglas	Great Bend	Barton	Osawatomie	Miami
Brown County	Brown	Halstead	Harvey	Rolla	Morton
Burlingame	Osage	Kismet-Plains	Seward	Shawnee Mission	Johnson
Deerfield	Kearny	Lansing	Leavenworth	Waconda	Mitchell
DeSoto	Johnson	Leoti	Wichita	West Elk	Elk

How does this district compare to the state's most efficient districts?

The following table compares Alma with two of the state's **efficient frontier** districts using two different criteria. The first comparison is made to the efficient frontier district with the most similar demographic constraints to this district. The second comparison is made to a similarly-sized efficient frontier district that spends no more than this district and produces the highest overall student performance.

		Most Similar	Best-Performing
	This	Frontier	Frontier
Indicator	District	District*	District**
District Name	Alma	Halstead	Baldwin City
District Code	D0329	D0440	D0348
County	Wabaunsee	Harvey	Douglas
Enrollment	476	735	1,407
Constraints			
Economically Disadvantaged Students	23.7%	34.7%	15.2%
English Language Learners	0.0%	0.0%	0.1%
Students with Disabilities	17.2%	18.7%	13.7%
Inputs			
Core Spending (per student)	\$7,380	\$6,792	\$6,490
Outputs			
Reading and Math Proficiency Rate	78.8%	83.9%	88.7%
Reading (grades 3-8)	85.2%	87.0%	94.3%
Reading (high school)	73.5%	83.8%	72.2%
Math (grades 3-8)	85.6%	86.3%	94.3%
Math (high school)	46.2%	64.0%	66.1%
Reading and Math Performance Index	49.9%	55.8%	64.0%
Reading (grades 3-8)	53.5%	56.7%	67.4%
Reading (high school)	48.6%	55.3%	44.6%
Math (grades 3-8)	55.4%	59.6%	74.1%
Math (high school)	24.2%	41.1%	40.1%

* Efficient frontier district with most similar constraints as this district.

Kansas School District Efficiency Study

District: Altoona-Midway (D0387)

Region: Southeast Kansas (Wilson County)

Why was this profile produced?

Governor Sebelius and the Ewing Marion Kauffman Foundation commissioned Standard & Poor's to study the relative efficiency of the state's school districts. A key component of the study is this two-page profile, produced for each of the state's less efficient school districts to provide them with a resource to help in their efforts to become more efficient.

What is a relative efficiency score? What does this district's score mean?

The relative efficiency score is derived by examining the relationship between three variables: **inputs** – how much the district spends per pupil; **outputs** – how well the district's students perform in reading and math; and **constraints** – how many of the district's students have special needs (i.e., economically disadvantaged backgrounds, physical or learning disabilities, or limited English proficiency), which are common factors that are outside of a district's control but can affect its spending and achievement levels.

Using linear mathematics, the district's data are then compared to all other school districts in the state to determine its relative efficiency score. Districts with the highest ratio of outputs to inputs in light of their constraints are considered to be on the efficiency frontier, and receive relative efficiency scores of 100%. Accordingly, they are referred to as **efficient frontier** districts. This district's score means that it is **61.81%** as efficient as the state's most efficient districts, taking into account its particular combination of inputs, outputs, and constraints.

This District's **Relative Efficiency Score** = 61.81%

How could this district improve its efficiency score? As noted above, this district has produced less than 100% of the outputs that might have been expected for its level of inputs and constraints, based on the performance of other districts. Had the district been able to increase its outputs to the target values shown in the accompanying table, while maintaining its current level of inputs, it would have reached the **efficient frontier**.

Output Improvement Targets

Outputs	Actual Value	Target Value*
Proficiency Rate	55.2%	89.3%
Performance Index	29.3%	59.1%

*Had this district achieved the target values, it would have received a 100% relative efficiency score.

Which data are included in the calculation of the district's efficiency score?

Inputs

Core Spending
 (\$ per student spent on co

(\$ per student spent on core day-to-day operations, adjusted for local differences in purchasing power)

<u>Constraints</u> (factors outside of the district's control)

- Enrollment of Economically Disadvantaged Students
- Enrollment of English Language Learners
- Enrollment of Students with Disabilities

- Reading and Math Proficiency Rate (percent of reading and math tests scoring at the "proficient" standard or higher)
- Reading and Math Performance Index (an index that goes beyond measuring proficiency by awarding points for all tests that score above the lowest level – "basic", "proficient", "advanced", and "exemplary" – with higher scores awarded more points than lower scores)

Kansas School District Efficiency Study

District: Altoona-Midway (D0387)

Region: Southeast Kansas (Wilson County)

Which Kansas districts are the most efficient?

A total of 21 districts across the state have been identified as **efficient frontier** districts (achieving relative efficiency scores of 100%); these are listed alphabetically in the following table. One (or more) of these districts may serve as the source of promising practices that might be replicated in order to improve this district's performance.

District	County	District	<u>County</u>	District	County
Arkansas City	Cowley	Dodge City	Ford	Lyons	Rice
Ashland	Clark	Gardner-Edgerton	Johnson	Newton	Harvey
Baldwin City	Douglas	Great Bend	Barton	Osawatomie	Miami
Brown County	Brown	Halstead	Harvey	Rolla	Morton
Burlingame	Osage	Kismet-Plains	Seward	Shawnee Mission	Johnson
Deerfield	Kearny	Lansing	Leavenworth	Waconda	Mitchell
DeSoto	Johnson	Leoti	Wichita	West Elk	Elk

How does this district compare to the state's most efficient districts?

The following table compares Altoona-Midway with two of the state's **efficient frontier** districts using two different criteria. The first comparison is made to the efficient frontier district with the most similar demographic constraints to this district. The second comparison is made to a similarly-sized efficient frontier district that spends no more than this district and produces the highest overall student performance.

Indicator	This District	Most Similar Frontier District*	Best-Performing Frontier District**
District Name	Altoona- Midway	West Elk	Waconda
District Code	D0387	D0282	D0272
County	Wilson	Elk	Mitchell
Enrollment	271	445	365
Constraints			
Economically Disadvantaged Students	51.9%	54.7%	44.3%
English Language Learners	0.0%	0.1%	0.0%
Students with Disabilities	26.8%	27.7%	12.9%
Inputs			
Core Spending (per student)	\$9,497	\$8,950	\$9,480
Outputs			
Reading and Math Proficiency Rate	55.2%	85.1%	94.5%
Reading (grades 3-8)	64.2%	89.0%	96.9%
Reading (high school)	59.6%	70.5%	88.6%
Math (grades 3-8)	51.0%	92.6%	96.6%
Math (high school)	41.5%	62.0%	92.0%
Reading and Math Performance Index	29.3%	56.6%	70.2%
Reading (grades 3-8)	34.7%	58.4%	70.4%
Reading (high school)	36.9%	40.3%	61.8%
Math (grades 3-8)	24.5%	66.4%	77.0%
Math (high school) * Efficient frontier district with most similar cons	23.7%	34.7%	64.0%

* Efficient frontier district with most similar constraints as this district.

Kansas School District Efficiency Study

District: Andover (D0385)

Region: South Central Kansas (Butler County)

Why was this profile produced?

Governor Sebelius and the Ewing Marion Kauffman Foundation commissioned Standard & Poor's to study the relative efficiency of the state's school districts. A key component of the study is this two-page profile, produced for each of the state's less efficient school districts to provide them with a resource to help in their efforts to become more efficient.

What is a relative efficiency score? What does this district's score mean?

The relative efficiency score is derived by examining the relationship between three variables: **inputs** – how much the district spends per pupil; **outputs** – how well the district's students perform in reading and math; and **constraints** – how many of the district's students have special needs (i.e., economically disadvantaged backgrounds, physical or learning disabilities, or limited English proficiency), which are common factors that are outside of a district's control but can affect its spending and achievement levels.

Using linear mathematics, the district's data are then compared to all other school districts in the state to determine its relative efficiency score. Districts with the highest ratio of outputs to inputs in light of their constraints are considered to be on the efficiency frontier, and receive relative efficiency scores of 100%. Accordingly, they are referred to as **efficient frontier** districts. This district's score means that it is **92.26%** as efficient as the state's most efficient districts, taking into account its particular combination of inputs, outputs, and constraints.

This District's **Relative Efficiency Score** = 92.26%

How could this district improve its efficiency score? As noted above, this district has produced less than 100% of the outputs that might have been expected for its level of inputs and constraints, based on the performance of other districts. Had the district been able to increase its outputs to the target values shown in the accompanying table, while maintaining its current level of inputs, it would have reached the **efficient frontier**.

Output Improvement Targets

Outputs	Actual Value	Target Value*
Proficiency Rate	83.4%	90.4%
Performance Index	55.1%	61.0%

*Had this district achieved the target values, it would have received a 100% relative efficiency score.

Which data are included in the calculation of the district's efficiency score?

Inputs

Core Spending
 (\$ per student spent on core day-to-day operations,

adjusted for local differences in purchasing power)

Constraints (factors outside of the district's control)

- Enrollment of Economically Disadvantaged Students
- Enrollment of English Language Learners
- Enrollment of Students with Disabilities

- **Reading and Math Proficiency Rate** (percent of reading and math tests scoring at the "proficient" standard or higher)
- Reading and Math Performance Index
 (an index that goes beyond measuring proficiency by awarding points for all tests that score above the lowest level – "basic",
 "proficient", "advanced", and "exemplary" – with higher scores awarded more points than lower scores)

Kansas School District Efficiency Study

District: Andover (D0385)

Region: South Central Kansas (Butler County)

Which Kansas districts are the most efficient?

A total of 21 districts across the state have been identified as **efficient frontier** districts (achieving relative efficiency scores of 100%); these are listed alphabetically in the following table. One (or more) of these districts may serve as the source of promising practices that might be replicated in order to improve this district's performance.

District	<u>County</u>	District	<u>County</u>	District	County
Arkansas City	Cowley	Dodge City	Ford	Lyons	Rice
Ashland	Clark	Gardner-Edgerton	Johnson	Newton	Harvey
Baldwin City	Douglas	Great Bend	Barton	Osawatomie	Miami
Brown County	Brown	Halstead	Harvey	Rolla	Morton
Burlingame	Osage	Kismet-Plains	Seward	Shawnee Mission	Johnson
Deerfield	Kearny	Lansing	Leavenworth	Waconda	Mitchell
DeSoto	Johnson	Leoti	Wichita	West Elk	Elk

How does this district compare to the state's most efficient districts?

The following table compares Andover with two of the state's **efficient frontier** districts using two different criteria. The first comparison is made to the efficient frontier district with the most similar demographic constraints to this district. The second comparison is made to a similarly-sized efficient frontier district that spends no more than this district and produces the highest overall student performance.

Indicator	This District	Most Similar Frontier District*	Best-Performing Frontier District**
District Name	Andover	Lansing	Gardner-Edgerton
District Code	D0385	D0469	D0231
County	Butler	Leavenworth	Johnson
Enrollment	3,968	2,197	3,782
Constraints	· · ·		
Economically Disadvantaged Students	10.4%	9.1%	21.5%
English Language Learners	0.9%	0.4%	0.9%
Students with Disabilities	11.0%	10.8%	12.2%
Inputs			
Core Spending (per student)	\$5,462	\$4,722	\$5,565
Outputs		•	
Reading and Math Proficiency Rate	83.4%	82.9%	89.0%
Reading (grades 3-8)	89.3%	87.3%	88.9%
Reading (high school)	81.6%	78.6%	87.6%
Math (grades 3-8)	82.7%	85.5%	92.0%
Math (high school)	70.0%	70.2%	78.7%
Reading and Math Performance Index	55.1%	54.3%	61.5%
Reading (grades 3-8)	60.3%	57.2%	59.6%
Reading (high school)	52.7%	50.9%	63.8%
Math (grades 3-8)	53.8%	57.8%	65.9%
Math (high school)	45.7%	41.5%	50.3%

* Efficient frontier district with most similar constraints as this district.

Kansas School District Efficiency Study

District: Anthony-Harper (D0361)

Region: South Central Kansas (Harper County)

Why was this profile produced?

Governor Sebelius and the Ewing Marion Kauffman Foundation commissioned Standard & Poor's to study the relative efficiency of the state's school districts. A key component of the study is this two-page profile, produced for each of the state's less efficient school districts to provide them with a resource to help in their efforts to become more efficient.

What is a relative efficiency score? What does this district's score mean?

The relative efficiency score is derived by examining the relationship between three variables: **inputs** – how much the district spends per pupil; **outputs** – how well the district's students perform in reading and math; and **constraints** – how many of the district's students have special needs (i.e., economically disadvantaged backgrounds, physical or learning disabilities, or limited English proficiency), which are common factors that are outside of a district's control but can affect its spending and achievement levels.

Using linear mathematics, the district's data are then compared to all other school districts in the state to determine its relative efficiency score. Districts with the highest ratio of outputs to inputs in light of their constraints are considered to be on the efficiency frontier, and receive relative efficiency scores of 100%. Accordingly, they are referred to as **efficient frontier** districts. This district's score means that it is **85.62%** as efficient as the state's most efficient districts, taking into account its particular combination of inputs, outputs, and constraints.

This District's **Relative Efficiency Score** = 85.62%

How could this district improve its efficiency score? As noted above, this district has produced less than 100% of the outputs that might have been expected for its level of inputs and constraints, based on the performance of other districts. Had the district been able to increase its outputs to the target values shown in the accompanying table, while maintaining its current level of inputs, it would have reached the **efficient frontier**.

Output Improvement Targets

Outputs	Actual Value	Target Value*
Proficiency Rate	76.8%	89.7%
Performance Index	47.5%	58.5%

*Had this district achieved the target values, it would have received a 100% relative efficiency score.

Which data are included in the calculation of the district's efficiency score?

Inputs

Core Spending
 (\$ per student spent on co

(\$ per student spent on core day-to-day operations, adjusted for local differences in purchasing power)

<u>Constraints</u> (factors outside of the district's control)

- Enrollment of Economically Disadvantaged Students
- Enrollment of English Language Learners
- Enrollment of Students with Disabilities

- Reading and Math Proficiency Rate (percent of reading and math tests scoring at the "proficient" standard or higher)
- Reading and Math Performance Index (an index that goes beyond measuring proficiency by awarding points for all tests that score above the lowest level – "basic", "proficient", "advanced", and "exemplary" – with higher scores awarded more points than lower scores)

Kansas School District Efficiency Study

District: Anthony-Harper (D0361)

Region: South Central Kansas (Harper County)

Which Kansas districts are the most efficient?

A total of 21 districts across the state have been identified as **efficient frontier** districts (achieving relative efficiency scores of 100%); these are listed alphabetically in the following table. One (or more) of these districts may serve as the source of promising practices that might be replicated in order to improve this district's performance.

District	<u>County</u>	District	<u>County</u>	District	County
Arkansas City	Cowley	Dodge City	Ford	Lyons	Rice
Ashland	Clark	Gardner-Edgerton	Johnson	Newton	Harvey
Baldwin City	Douglas	Great Bend	Barton	Osawatomie	Miami
Brown County	Brown	Halstead	Harvey	Rolla	Morton
Burlingame	Osage	Kismet-Plains	Seward	Shawnee Mission	Johnson
Deerfield	Kearny	Lansing	Leavenworth	Waconda	Mitchell
DeSoto	Johnson	Leoti	Wichita	West Elk	Elk

How does this district compare to the state's most efficient districts?

The following table compares Anthony-Harper with two of the state's **efficient frontier** districts using two different criteria. The first comparison is made to the efficient frontier district with the most similar demographic constraints to this district. The second comparison is made to a similarly-sized efficient frontier district that spends no more than this district and produces the highest overall student performance.

	This	Most Similar Frontier	Best-Performing Frontier
Indicator	District	District*	District**
District Name	Anthony-Harper	Halstead	Baldwin City
District Code	D0361	D0440	D0348
County	Harper	Harvey	Douglas
Enrollment	927	735	1,407
Constraints			
Economically Disadvantaged Students	49.7%	34.7%	15.2%
English Language Learners	1.0%	0.0%	0.1%
Students with Disabilities	18.1%	18.7%	13.7%
Inputs			
Core Spending (per student)	\$9,159	\$6,792	\$6,490
Outputs			
Reading and Math Proficiency Rate	76.8%	83.9%	88.7%
Reading (grades 3-8)	80.4%	87.0%	94.3%
Reading (high school)	67.6%	83.8%	72.2%
Math (grades 3-8)	82.7%	86.3%	94.3%
Math (high school)	52.1%	64.0%	66.1%
Reading and Math Performance Index	47.5%	55.8%	64.0%
Reading (grades 3-8)	49.8%	56.7%	67.4%
Reading (high school)	41.9%	55.3%	44.6%
Math (grades 3-8)	52.3%	59.6%	74.1%
Math (high school)	29.0%	41.1%	40.1%

* Efficient frontier district with most similar constraints as this district.

Kansas School District Efficiency Study

District: Atchison (D0409)

Region: Northeast Kansas (Atchison County)

Why was this profile produced?

Governor Sebelius and the Ewing Marion Kauffman Foundation commissioned Standard & Poor's to study the relative efficiency of the state's school districts. A key component of the study is this two-page profile, produced for each of the state's less efficient school districts to provide them with a resource to help in their efforts to become more efficient.

What is a relative efficiency score? What does this district's score mean?

The relative efficiency score is derived by examining the relationship between three variables: **inputs** – how much the district spends per pupil; **outputs** – how well the district's students perform in reading and math; and **constraints** – how many of the district's students have special needs (i.e., economically disadvantaged backgrounds, physical or learning disabilities, or limited English proficiency), which are common factors that are outside of a district's control but can affect its spending and achievement levels.

Using linear mathematics, the district's data are then compared to all other school districts in the state to determine its relative efficiency score. Districts with the highest ratio of outputs to inputs in light of their constraints are considered to be on the efficiency frontier, and receive relative efficiency scores of 100%. Accordingly, they are referred to as **efficient frontier** districts. This district's score means that it is **92.30%** as efficient as the state's most efficient districts, taking into account its particular combination of inputs, outputs, and constraints.

This District's **Relative Efficiency Score** = 92.30%

How could this district improve its efficiency score? As noted above, this district has produced less than 100% of the outputs that might have been expected for its level of inputs and constraints, based on the performance of other districts. Had the district been able to increase its outputs to the target values shown in the accompanying table, while maintaining its current level of inputs, it would have reached the **efficient frontier**.

Output Improvement Targets

Outputs	Actual Value	Target Value*
Proficiency Rate	72.7%	78.7%
Performance Index	45.5%	51.2%

*Had this district achieved the target values, it would have received a 100% relative efficiency score.

Which data are included in the calculation of the district's efficiency score?

Inputs

• Core Spending (\$ per student spent on c

(\$ per student spent on core day-to-day operations, adjusted for local differences in purchasing power)

Constraints (factors outside of the district's control)

- Enrollment of Economically Disadvantaged Students
- Enrollment of English Language Learners
- Enrollment of Students with Disabilities

- Reading and Math Proficiency Rate (percent of reading and math tests scoring at the "proficient" standard or higher)
- Reading and Math Performance Index (an index that goes beyond measuring proficiency by awarding points for all tests that score above the lowest level – "basic", "proficient", "advanced", and "exemplary" – with higher scores awarded more points than lower scores)

Kansas School District Efficiency Study

District: Atchison (D0409)

Region: Northeast Kansas (Atchison County)

Which Kansas districts are the most efficient?

A total of 21 districts across the state have been identified as **efficient frontier** districts (achieving relative efficiency scores of 100%); these are listed alphabetically in the following table. One (or more) of these districts may serve as the source of promising practices that might be replicated in order to improve this district's performance.

District	<u>County</u>	District	<u>County</u>	District	County
Arkansas City	Cowley	Dodge City	Ford	Lyons	Rice
Ashland	Clark	Gardner-Edgerton	Johnson	Newton	Harvey
Baldwin City	Douglas	Great Bend	Barton	Osawatomie	Miami
Brown County	Brown	Halstead	Harvey	Rolla	Morton
Burlingame	Osage	Kismet-Plains	Seward	Shawnee Mission	Johnson
Deerfield	Kearny	Lansing	Leavenworth	Waconda	Mitchell
DeSoto	Johnson	Leoti	Wichita	West Elk	Elk

How does this district compare to the state's most efficient districts?

The following table compares Atchison with two of the state's **efficient frontier** districts using two different criteria. The first comparison is made to the efficient frontier district with the most similar demographic constraints to this district. The second comparison is made to a similarly-sized efficient frontier district that spends no more than this district and produces the highest overall student performance.

	This	Most Similar Frontier	Best-Performing Frontier
Indicator	District	District*	District**
District Name	Atchison	Osawatomie	Gardner-Edgerton
District Code	D0409	D0367	D0231
County	Atchison	Miami	Johnson
Enrollment	1,648	1,235	3,782
Constraints			
Economically Disadvantaged Students	56.0%	50.8%	21.5%
English Language Learners	0.0%	0.0%	0.9%
Students with Disabilities	19.3%	15.3%	12.2%
Inputs			
Core Spending (per student)	\$7,824	\$6,193	\$5,565
Outputs			
Reading and Math Proficiency Rate	72.7%	75.5%	89.0%
Reading (grades 3-8)	76.7%	78.5%	88.9%
Reading (high school)	61.6%	78.4%	87.6%
Math (grades 3-8)	77.7%	81.4%	92.0%
Math (high school)	50.2%	39.7%	78.7%
Reading and Math Performance Index	45.5%	45.7%	61.5%
Reading (grades 3-8)	46.6%	48.0%	59.6%
Reading (high school)	38.4%	43.0%	63.8%
Math (grades 3-8)	50.7%	50.1%	65.9%
Math (high school)	30.1%	22.0%	50.3%

* Efficient frontier district with most similar constraints as this district.

Kansas School District Efficiency Study

District: Atchison County (D0377)

Region: Northeast Kansas (Atchison County)

Why was this profile produced?

Governor Sebelius and the Ewing Marion Kauffman Foundation commissioned Standard & Poor's to study the relative efficiency of the state's school districts. A key component of the study is this two-page profile, produced for each of the state's less efficient school districts to provide them with a resource to help in their efforts to become more efficient.

What is a relative efficiency score? What does this district's score mean?

The relative efficiency score is derived by examining the relationship between three variables: **inputs** – how much the district spends per pupil; **outputs** – how well the district's students perform in reading and math; and **constraints** – how many of the district's students have special needs (i.e., economically disadvantaged backgrounds, physical or learning disabilities, or limited English proficiency), which are common factors that are outside of a district's control but can affect its spending and achievement levels.

Using linear mathematics, the district's data are then compared to all other school districts in the state to determine its relative efficiency score. Districts with the highest ratio of outputs to inputs in light of their constraints are considered to be on the efficiency frontier, and receive relative efficiency scores of 100%. Accordingly, they are referred to as **efficient frontier** districts. This district's score means that it is **75.67%** as efficient as the state's most efficient districts, taking into account its particular combination of inputs, outputs, and constraints.

This District's **Relative Efficiency Score** = **75.67%**

How could this district improve its efficiency score? As noted above, this district has produced less than 100% of the outputs that might have been expected for its level of inputs and constraints, based on the performance of other districts. Had the district been able to increase its outputs to the target values shown in the accompanying table, while maintaining its current level of inputs, it would have reached the **efficient frontier**.

Output Improvement Targets

Outputs	Actual Value	Target Value*
Proficiency Rate	71.2%	94.1%
Performance Index	42.9%	62.7%

*Had this district achieved the target values, it would have received a 100% relative efficiency score.

Which data are included in the calculation of the district's efficiency score?

Inputs

Core Spending
 (\$ per student spent on c

(\$ per student spent on core day-to-day operations, adjusted for local differences in purchasing power)

<u>Constraints</u> (factors outside of the district's control)

- Enrollment of Economically Disadvantaged Students
- Enrollment of English Language Learners
- Enrollment of Students with Disabilities

- **Reading and Math Proficiency Rate** (percent of reading and math tests scoring at the "proficient" standard or higher)
- Reading and Math Performance Index

 (an index that goes beyond measuring proficiency by awarding points for all tests that score above the lowest level "basic",
 "proficient", "advanced", and "exemplary" with higher scores awarded more points than lower scores)

Kansas School District Efficiency Study

District: Atchison County (D0377)

Region: Northeast Kansas (Atchison County)

Which Kansas districts are the most efficient?

A total of 21 districts across the state have been identified as **efficient frontier** districts (achieving relative efficiency scores of 100%); these are listed alphabetically in the following table. One (or more) of these districts may serve as the source of promising practices that might be replicated in order to improve this district's performance.

District	County	District	<u>County</u>	District	County
Arkansas City	Cowley	Dodge City	Ford	Lyons	Rice
Ashland	Clark	Gardner-Edgerton	Johnson	Newton	Harvey
Baldwin City	Douglas	Great Bend	Barton	Osawatomie	Miami
Brown County	Brown	Halstead	Harvey	Rolla	Morton
Burlingame	Osage	Kismet-Plains	Seward	Shawnee Mission	Johnson
Deerfield	Kearny	Lansing	Leavenworth	Waconda	Mitchell
DeSoto	Johnson	Leoti	Wichita	West Elk	Elk

How does this district compare to the state's most efficient districts?

The following table compares Atchison County with two of the state's **efficient frontier** districts using two different criteria. The first comparison is made to the efficient frontier district with the most similar demographic constraints to this district. The second comparison is made to a similarly-sized efficient frontier district that spends no more than this district and produces the highest overall student performance.

Indicator	This District	Most Similar Frontier District*	Best-Performing Frontier District**
District Name	Atchison County	Osawatomie	Baldwin City
District Code	D0377	D0367	D0348
County	Atchison	Miami	Douglas
Enrollment	771	1,235	1,407
Constraints			
Economically Disadvantaged Students	35.2%	50.8%	15.2%
English Language Learners	0.1%	0.0%	0.1%
Students with Disabilities	13.1%	15.3%	13.7%
Inputs			
Core Spending (per student)	\$7,478	\$6,193	\$6,490
Outputs			
Reading and Math Proficiency Rate	71.2%	75.5%	88.7%
Reading (grades 3-8)	79.6%	78.5%	94.3%
Reading (high school)	70.2%	78.4%	72.2%
Math (grades 3-8)	68.7%	81.4%	94.3%
Math (high school)	62.4%	39.7%	66.1%
Reading and Math Performance Index	42.9%	45.7%	64.0%
Reading (grades 3-8)	49.2%	48.0%	67.4%
Reading (high school)	39.0%	43.0%	44.6%
Math (grades 3-8)	41.9%	50.1%	74.1%
Math (high school)	36.7%	22.0%	40.1%

* Efficient frontier district with most similar constraints as this district.

Kansas School District Efficiency Study

District: Auburn Washburn (D0437)

Region: Northeast Kansas (Shawnee County)

Why was this profile produced?

Governor Sebelius and the Ewing Marion Kauffman Foundation commissioned Standard & Poor's to study the relative efficiency of the state's school districts. A key component of the study is this two-page profile, produced for each of the state's less efficient school districts to provide them with a resource to help in their efforts to become more efficient.

What is a relative efficiency score? What does this district's score mean?

The relative efficiency score is derived by examining the relationship between three variables: **inputs** – how much the district spends per pupil; **outputs** – how well the district's students perform in reading and math; and **constraints** – how many of the district's students have special needs (i.e., economically disadvantaged backgrounds, physical or learning disabilities, or limited English proficiency), which are common factors that are outside of a district's control but can affect its spending and achievement levels.

Using linear mathematics, the district's data are then compared to all other school districts in the state to determine its relative efficiency score. Districts with the highest ratio of outputs to inputs in light of their constraints are considered to be on the efficiency frontier, and receive relative efficiency scores of 100%. Accordingly, they are referred to as **efficient frontier** districts. This district's score means that it is **97.68%** as efficient as the state's most efficient districts, taking into account its particular combination of inputs, outputs, and constraints.

This District's **Relative Efficiency Score = 97.68%**

How could this district improve its efficiency score? As noted above, this district has produced less than 100% of the outputs that might have been expected for its level of inputs and constraints, based on the performance of other districts. Had the district been able to increase its outputs to the target values shown in the accompanying table, while maintaining its current level of inputs, it would have reached the **efficient frontier**.

Output Improvement Targets

Outputs	Actual Value	Target Value*
Proficiency Rate	84.1%	86.1%
Performance Index	56.8%	58.9%

*Had this district achieved the target values, it would have received a 100% relative efficiency score.

Which data are included in the calculation of the district's efficiency score?

Inputs

Core Spending
 (\$ per student spent on control

(\$ per student spent on core day-to-day operations, adjusted for local differences in purchasing power)

<u>Constraints</u> (factors outside of the district's control)

- Enrollment of Economically Disadvantaged Students
- Enrollment of English Language Learners
- Enrollment of Students with Disabilities

- Reading and Math Proficiency Rate (percent of reading and math tests scoring at the "proficient" standard or higher)
- Reading and Math Performance Index (an index that goes beyond measuring proficiency by awarding points for all tests that score above the lowest level – "basic", "proficient", "advanced", and "exemplary" – with higher scores awarded more points than lower scores)

Kansas School District Efficiency Study

District: Auburn Washburn (D0437)

Region: Northeast Kansas (Shawnee County)

Which Kansas districts are the most efficient?

A total of 21 districts across the state have been identified as **efficient frontier** districts (achieving relative efficiency scores of 100%); these are listed alphabetically in the following table. One (or more) of these districts may serve as the source of promising practices that might be replicated in order to improve this district's performance.

District	County	District	<u>County</u>	District	County
Arkansas City	Cowley	Dodge City	Ford	Lyons	Rice
Ashland	Clark	Gardner-Edgerton	Johnson	Newton	Harvey
Baldwin City	Douglas	Great Bend	Barton	Osawatomie	Miami
Brown County	Brown	Halstead	Harvey	Rolla	Morton
Burlingame	Osage	Kismet-Plains	Seward	Shawnee Mission	Johnson
Deerfield	Kearny	Lansing	Leavenworth	Waconda	Mitchell
DeSoto	Johnson	Leoti	Wichita	West Elk	Elk

How does this district compare to the state's most efficient districts?

The following table compares Auburn Washburn with two of the state's **efficient frontier** districts using two different criteria. The first comparison is made to the efficient frontier district with the most similar demographic constraints to this district. The second comparison is made to a similarly-sized efficient frontier district that spends no more than this district and produces the highest overall student performance. In this case, the comparison district under both criteria is the same.

Indicator	This District	Most Similar Frontier District*	Best-Performing Frontier District**
District Name	Auburn Washburn	Gardner- Edgerton	Gardner-Edgerton
District Code	D0437	D0231	D0231
County	Shawnee	Johnson	Johnson
Enrollment	5,302	3,782	3,782
Constraints			
Economically Disadvantaged Students	22.1%	21.5%	21.5%
English Language Learners	1.3%	0.9%	0.9%
Students with Disabilities	13.5%	12.2%	12.2%
Inputs			
Core Spending (per student)	\$5,830	\$5,565	\$5,565
Outputs			
Reading and Math Proficiency Rate	84.1%	89.0%	89.0%
Reading (grades 3-8)	86.9%	88.9%	88.9%
Reading (high school)	80.0%	87.6%	87.6%
Math (grades 3-8)	86.4%	92.0%	92.0%
Math (high school)	70.2%	78.7%	78.7%
Reading and Math Performance Index	56.8%	61.5%	61.5%
Reading (grades 3-8)	58.2%	59.6%	59.6%
Reading (high school)	53.4%	63.8%	63.8%
Math (grades 3-8)	59.3%	65.9%	65.9%
Math (high school) *Efficient frontier district with most similar cons	47.6%	50.3%	50.3%

* Efficient frontier district with most similar constraints as this district.

Kansas School District Efficiency Study

District: Augusta (D0402)

Region: South Central Kansas (Butler County)

Why was this profile produced?

Governor Sebelius and the Ewing Marion Kauffman Foundation commissioned Standard & Poor's to study the relative efficiency of the state's school districts. A key component of the study is this two-page profile, produced for each of the state's less efficient school districts to provide them with a resource to help in their efforts to become more efficient.

What is a relative efficiency score? What does this district's score mean?

The relative efficiency score is derived by examining the relationship between three variables: **inputs** – how much the district spends per pupil; **outputs** – how well the district's students perform in reading and math; and **constraints** – how many of the district's students have special needs (i.e., economically disadvantaged backgrounds, physical or learning disabilities, or limited English proficiency), which are common factors that are outside of a district's control but can affect its spending and achievement levels.

Using linear mathematics, the district's data are then compared to all other school districts in the state to determine its relative efficiency score. Districts with the highest ratio of outputs to inputs in light of their constraints are considered to be on the efficiency frontier, and receive relative efficiency scores of 100%. Accordingly, they are referred to as **efficient frontier** districts. This district's score means that it is **95.14%** as efficient as the state's most efficient districts, taking into account its particular combination of inputs, outputs, and constraints.

This District's **Relative Efficiency Score** = 95.14%

How could this district improve its efficiency score? As noted above, this district has produced less than 100% of the outputs that might have been expected for its level of inputs and constraints, based on the performance of other districts. Had the district been able to increase its outputs to the target values shown in the accompanying table, while maintaining its current level of inputs, it would have reached the **efficient frontier**.

Output Improvement Targets

Outputs	Actual Value	Target Value*
Proficiency Rate	76.5%	80.4%
Performance Index	48.8%	54.9%

*Had this district achieved the target values, it would have received a 100% relative efficiency score.

Which data are included in the calculation of the district's efficiency score?

Inputs

Core Spending
 (\$ per student spent on core day-to-day operations,

adjusted for local differences in purchasing power)

<u>Constraints</u> (factors outside of the district's control)

- Enrollment of Economically Disadvantaged Students
- Enrollment of English Language Learners
- Enrollment of Students with Disabilities

- Reading and Math Proficiency Rate (percent of reading and math tests scoring at the "proficient" standard or higher)
- Reading and Math Performance Index (an index that goes beyond measuring proficiency by awarding points for all tests that score above the lowest level – "basic", "proficient", "advanced", and "exemplary" – with higher scores awarded more points than lower scores)

Kansas School District Efficiency Study

District: Augusta (D0402)

Region: South Central Kansas (Butler County)

Which Kansas districts are the most efficient?

A total of 21 districts across the state have been identified as **efficient frontier** districts (achieving relative efficiency scores of 100%); these are listed alphabetically in the following table. One (or more) of these districts may serve as the source of promising practices that might be replicated in order to improve this district's performance.

District	<u>County</u>	District	<u>County</u>	District	County
Arkansas City	Cowley	Dodge City	Ford	Lyons	Rice
Ashland	Clark	Gardner-Edgerton	Johnson	Newton	Harvey
Baldwin City	Douglas	Great Bend	Barton	Osawatomie	Miami
Brown County	Brown	Halstead	Harvey	Rolla	Morton
Burlingame	Osage	Kismet-Plains	Seward	Shawnee Mission	Johnson
Deerfield	Kearny	Lansing	Leavenworth	Waconda	Mitchell
DeSoto	Johnson	Leoti	Wichita	West Elk	Elk

How does this district compare to the state's most efficient districts?

The following table compares Augusta with two of the state's **efficient frontier** districts using two different criteria. The first comparison is made to the efficient frontier district with the most similar demographic constraints to this district. The second comparison is made to a similarly-sized efficient frontier district that spends no more than this district and produces the highest overall student performance. In this case, the comparison district under both criteria is the same.

Indicator	This District	Most Similar Frontier District*	Best-Performing Frontier District**
District Name	Augusta	Gardner- Edgerton	Gardner-Edgerton
District Code	D0402	D0231	D0231
County	Butler	Johnson	Johnson
Enrollment	2,245	3,782	3,782
Constraints			
Economically Disadvantaged Students	29.8%	21.5%	21.5%
English Language Learners	0.1%	0.9%	0.9%
Students with Disabilities	12.6%	12.2%	12.2%
Inputs			
Core Spending (per student)	\$5,605	\$5,565	\$5,565
Outputs			
Reading and Math Proficiency Rate	76.5%	89.0%	89.0%
Reading (grades 3-8)	83.2%	88.9%	88.9%
Reading (high school)	76.1%	87.6%	87.6%
Math (grades 3-8)	75.9%	92.0%	92.0%
Math (high school)	56.6%	78.7%	78.7%
Reading and Math Performance Index	48.8%	61.5%	61.5%
Reading (grades 3-8)	53.3%	59.6%	59.6%
Reading (high school)	48.0%	63.8%	63.8%
Math (grades 3-8)	48.8%	65.9%	65.9%
Math (high school)	35.3%	50.3%	50.3%

* Efficient frontier district with most similar constraints as this district.

Kansas School District Efficiency Study

District: Axtell (D0488)

Region: Northeast Kansas (Marshall County)

Why was this profile produced?

Governor Sebelius and the Ewing Marion Kauffman Foundation commissioned Standard & Poor's to study the relative efficiency of the state's school districts. A key component of the study is this two-page profile, produced for each of the state's less efficient school districts to provide them with a resource to help in their efforts to become more efficient.

What is a relative efficiency score? What does this district's score mean?

The relative efficiency score is derived by examining the relationship between three variables: **inputs** – how much the district spends per pupil; **outputs** – how well the district's students perform in reading and math; and **constraints** – how many of the district's students have special needs (i.e., economically disadvantaged backgrounds, physical or learning disabilities, or limited English proficiency), which are common factors that are outside of a district's control but can affect its spending and achievement levels.

Using linear mathematics, the district's data are then compared to all other school districts in the state to determine its relative efficiency score. Districts with the highest ratio of outputs to inputs in light of their constraints are considered to be on the efficiency frontier, and receive relative efficiency scores of 100%. Accordingly, they are referred to as **efficient frontier** districts. This district's score means that it is **74.31%** as efficient as the state's most efficient districts, taking into account its particular combination of inputs, outputs, and constraints.

This District's **Relative Efficiency Score** = 74.31%

How could this district improve its efficiency score? As noted above, this district has produced less than 100% of the outputs that might have been expected for its level of inputs and constraints, based on the performance of other districts. Had the district been able to increase its outputs to the target values shown in the accompanying table, while maintaining its current level of inputs, it would have reached the **efficient frontier**.

Output Improvement Targets

Outputs	Actual Value	Target Value*
Proficiency Rate	72.5%	97.6%
Performance Index	44.1%	60.9%

*Had this district achieved the target values, it would have received a 100% relative efficiency score.

Which data are included in the calculation of the district's efficiency score?

Inputs

Core Spending
 (\$ per student spent on cor

(\$ per student spent on core day-to-day operations, adjusted for local differences in purchasing power)

Constraints (factors outside of the district's control)

- Enrollment of Economically Disadvantaged Students
- Enrollment of English Language Learners
- Enrollment of Students with Disabilities

- **Reading and Math Proficiency Rate** (percent of reading and math tests scoring at the "proficient" standard or higher)
- Reading and Math Performance Index
 (an index that goes beyond measuring proficiency by awarding points for all tests that score above the lowest level – "basic",
 "proficient", "advanced", and "exemplary" – with higher scores awarded more points than lower scores)

Kansas School District Efficiency Study

District: Axtell (D0488)

Region: Northeast Kansas (Marshall County)

Which Kansas districts are the most efficient?

A total of 21 districts across the state have been identified as **efficient frontier** districts (achieving relative efficiency scores of 100%); these are listed alphabetically in the following table. One (or more) of these districts may serve as the source of promising practices that might be replicated in order to improve this district's performance.

District	<u>County</u>	District	<u>County</u>	District	County
Arkansas City	Cowley	Dodge City	Ford	Lyons	Rice
Ashland	Clark	Gardner-Edgerton	Johnson	Newton	Harvey
Baldwin City	Douglas	Great Bend	Barton	Osawatomie	Miami
Brown County	Brown	Halstead	Harvey	Rolla	Morton
Burlingame	Osage	Kismet-Plains	Seward	Shawnee Mission	Johnson
Deerfield	Kearny	Lansing	Leavenworth	Waconda	Mitchell
DeSoto	Johnson	Leoti	Wichita	West Elk	Elk

How does this district compare to the state's most efficient districts?

The following table compares Axtell with two of the state's **efficient frontier** districts using two different criteria. The first comparison is made to the efficient frontier district with the most similar demographic constraints to this district. The second comparison is made to a similarly-sized efficient frontier district that spends no more than this district and produces the highest overall student performance.

		Most Similar	Best-Performing
	This	Frontier	Frontier
Indicator	District	District*	District**
District Name	Axtell	Halstead	Leoti
District Code	D0488	D0440	D0467
County	Marshall	Harvey	Wichita
Enrollment	349	735	501
Constraints			
Economically Disadvantaged Students	29.5%	34.7%	39.5%
English Language Learners	0.0%	0.0%	26.5%
Students with Disabilities	16.7%	18.7%	12.4%
Inputs			
Core Spending (per student)	\$8,280	\$6,792	\$8,455
Outputs			
Reading and Math Proficiency Rate	72.5%	83.9%	88.1%
Reading (grades 3-8)	76.0%	87.0%	84.4%
Reading (high school)	75.6%	83.8%	84.0%
Math (grades 3-8)	73.7%	86.3%	94.8%
Math (high school)	57.0%	64.0%	78.7%
Reading and Math Performance Index	44.1%	55.8%	58.9%
Reading (grades 3-8)	47.3%	56.7%	54.4%
Reading (high school)	43.1%	55.3%	62.3%
Math (grades 3-8)	45.7%	59.6%	63.1%
Math (high school)	32.2%	41.1%	57.5%

* Efficient frontier district with most similar constraints as this district.

Kansas School District Efficiency Study

District: B & B (D0451)

Region: Northeast Kansas (Nemaha County)

Why was this profile produced?

Governor Sebelius and the Ewing Marion Kauffman Foundation commissioned Standard & Poor's to study the relative efficiency of the state's school districts. A key component of the study is this two-page profile, produced for each of the state's less efficient school districts to provide them with a resource to help in their efforts to become more efficient.

What is a relative efficiency score? What does this district's score mean?

The relative efficiency score is derived by examining the relationship between three variables: **inputs** – how much the district spends per pupil; **outputs** – how well the district's students perform in reading and math; and **constraints** – how many of the district's students have special needs (i.e., economically disadvantaged backgrounds, physical or learning disabilities, or limited English proficiency), which are common factors that are outside of a district's control but can affect its spending and achievement levels.

Using linear mathematics, the district's data are then compared to all other school districts in the state to determine its relative efficiency score. Districts with the highest ratio of outputs to inputs in light of their constraints are considered to be on the efficiency frontier, and receive relative efficiency scores of 100%. Accordingly, they are referred to as **efficient frontier** districts. This district's score means that it is **83.09%** as efficient as the state's most efficient districts, taking into account its particular combination of inputs, outputs, and constraints.

This District's **Relative Efficiency Score = 83.09%**

How could this district improve its efficiency score? As noted above, this district has produced less than 100% of the outputs that might have been expected for its level of inputs and constraints, based on the performance of other districts. Had the district been able to increase its outputs to the target values shown in the accompanying table, while maintaining its current level of inputs, it would have reached the **efficient frontier**. This district's unattainable proficiency output target (greater than 100%) indicates that reaching the efficient frontier would also require reducing inputs; improving outputs alone would not be sufficient.

Output Improvement Targets

Outputs	Actual Value	Target Value*
Proficiency Rate	94.1%	>100%
Performance Index	64.2%	77.3%

*Had this district achieved the target values, it would have received a 100% relative efficiency score.

Note: A target value of ">100%" indicates that output improvements alone are not sufficient; input reductions are also necessary.

Which data are included in the calculation of the district's efficiency score?

Inputs

- **Outputs**
- Core Spending
 (\$ per student spent on core day-to-day operations, adjusted for local differences in purchasing power)

Constraints (factors outside of the district's control)

- Enrollment of Economically Disadvantaged Students
- Enrollment of English Language Learners
- Enrollment of Students with Disabilities

- Reading and Math Proficiency Rate (percent of reading and math tests scoring at the "proficient" standard or higher)
- Reading and Math Performance Index

 (an index that goes beyond measuring proficiency by awarding points for all tests that score above the lowest level "basic",
 "proficient", "advanced", and "exemplary" with higher scores awarded more points than lower scores)

Electronic copy available at: https://ssrn.com/abstract=2355427

Kansas School District Efficiency Study

District: B & B (D0451)

Region: Northeast Kansas (Nemaha County)

Which Kansas districts are the most efficient?

A total of 21 districts across the state have been identified as **efficient frontier** districts (achieving relative efficiency scores of 100%); these are listed alphabetically in the following table. One (or more) of these districts may serve as the source of promising practices that might be replicated in order to improve this district's performance.

District	County	District	<u>County</u>	District	County
Arkansas City	Cowley	Dodge City	Ford	Lyons	Rice
Ashland	Clark	Gardner-Edgerton	Johnson	Newton	Harvey
Baldwin City	Douglas	Great Bend	Barton	Osawatomie	Miami
Brown County	Brown	Halstead	Harvey	Rolla	Morton
Burlingame	Osage	Kismet-Plains	Seward	Shawnee Mission	Johnson
Deerfield	Kearny	Lansing	Leavenworth	Waconda	Mitchell
DeSoto	Johnson	Leoti	Wichita	West Elk	Elk

How does this district compare to the state's most efficient districts?

The following table compares B & B with two of the state's **efficient frontier** districts using two different criteria. The first comparison is made to the efficient frontier district with the most similar demographic constraints to this district. The second comparison is made to a similarly-sized efficient frontier district that spends no more than this district and produces the highest overall student performance.

		Most Similar	Best-Performing
	This	Frontier	Frontier
Indicator	District	District*	District**
District Name	B & B	Waconda	Leoti
District Code	D0451	D0272	D0467
County	Nemaha	Mitchell	Wichita
Enrollment	221	365	501
Constraints			
Economically Disadvantaged Students	27.4%	44.3%	39.5%
English Language Learners	0.0%	0.0%	26.5%
Students with Disabilities	10.3%	12.9%	12.4%
Inputs			
Core Spending (per student)	\$8,811	\$9,480	\$8,455
Outputs			
Reading and Math Proficiency Rate	94.1%	94.5%	88.1%
Reading (grades 3-8)	98.5%	96.9%	84.4%
Reading (high school)	93.3%	88.6%	84.0%
Math (grades 3-8)	93.9%	96.6%	94.8%
Math (high school)	84.4%	92.0%	78.7%
Reading and Math Performance Index	64.2%	70.2%	58.9%
Reading (grades 3-8)	64.4%	70.4%	54.4%
Reading (high school)	52.1%	61.8%	62.3%
Math (grades 3-8)	69.2%	77.0%	63.1%
Math (high school)	63.1%	64.0%	57.5%

* Efficient frontier district with most similar constraints as this district.

Kansas School District Efficiency Study

District: Barber (D0254)

Region: South Central Kansas (Barber County)

Why was this profile produced?

Governor Sebelius and the Ewing Marion Kauffman Foundation commissioned Standard & Poor's to study the relative efficiency of the state's school districts. A key component of the study is this two-page profile, produced for each of the state's less efficient school districts to provide them with a resource to help in their efforts to become more efficient.

What is a relative efficiency score? What does this district's score mean?

The relative efficiency score is derived by examining the relationship between three variables: **inputs** – how much the district spends per pupil; **outputs** – how well the district's students perform in reading and math; and **constraints** – how many of the district's students have special needs (i.e., economically disadvantaged backgrounds, physical or learning disabilities, or limited English proficiency), which are common factors that are outside of a district's control but can affect its spending and achievement levels.

Using linear mathematics, the district's data are then compared to all other school districts in the state to determine its relative efficiency score. Districts with the highest ratio of outputs to inputs in light of their constraints are considered to be on the efficiency frontier, and receive relative efficiency scores of 100%. Accordingly, they are referred to as **efficient frontier** districts. This district's score means that it is **66.90%** as efficient as the state's most efficient districts, taking into account its particular combination of inputs, outputs, and constraints.

This District's **Relative Efficiency Score** = 66.90%

How could this district improve its efficiency score? As noted above, this district has produced less than 100% of the outputs that might have been expected for its level of inputs and constraints, based on the performance of other districts. Had the district been able to increase its outputs to the target values shown in the accompanying table, while maintaining its current level of inputs, it would have reached the **efficient frontier**. This district's unattainable proficiency output target (greater than 100%) indicates that reaching the efficient frontier would also require reducing inputs; improving outputs alone would not be sufficient.

Output Improvement Targets

Outputs	Actual Value	Target Value*
Proficiency Rate	68.8%	>100%
Performance Index	38.0%	66.0%

*Had this district achieved the target values, it would have received a 100% relative efficiency score.

Note: A target value of ">100%" indicates that output improvements alone are not sufficient; input reductions are also necessary.

Which data are included in the calculation of the district's efficiency score?

Inputs

- **Outputs**
- Core Spending
 (\$ per student spent on core day-to-day operations, adjusted for local differences in purchasing power)

Constraints (factors outside of the district's control)

- Enrollment of Economically Disadvantaged Students
- Enrollment of English Language Learners
- Enrollment of Students with Disabilities

- Reading and Math Proficiency Rate (percent of reading and math tests scoring at the "proficient" standard or higher)
- Reading and Math Performance Index

 (an index that goes beyond measuring proficiency by awarding points for all tests that score above the lowest level "basic",
 "proficient", "advanced", and "exemplary" with higher scores awarded more points than lower scores)

Electronic copy available at: https://ssrn.com/abstract=2355427

Kansas School District Efficiency Study

District: Barber (D0254)

Region: South Central Kansas (Barber County)

Which Kansas districts are the most efficient?

A total of 21 districts across the state have been identified as **efficient frontier** districts (achieving relative efficiency scores of 100%); these are listed alphabetically in the following table. One (or more) of these districts may serve as the source of promising practices that might be replicated in order to improve this district's performance.

District	County	District	<u>County</u>	District	County
Arkansas City	Cowley	Dodge City	Ford	Lyons	Rice
Ashland	Clark	Gardner-Edgerton	Johnson	Newton	Harvey
Baldwin City	Douglas	Great Bend	Barton	Osawatomie	Miami
Brown County	Brown	Halstead	Harvey	Rolla	Morton
Burlingame	Osage	Kismet-Plains	Seward	Shawnee Mission	Johnson
Deerfield	Kearny	Lansing	Leavenworth	Waconda	Mitchell
DeSoto	Johnson	Leoti	Wichita	West Elk	Elk

How does this district compare to the state's most efficient districts?

The following table compares Barber with two of the state's **efficient frontier** districts using two different criteria. The first comparison is made to the efficient frontier district with the most similar demographic constraints to this district. The second comparison is made to a similarly-sized efficient frontier district that spends no more than this district and produces the highest overall student performance.

		Most Similar	Best-Performing
Indicator	This District	Frontier District*	Frontier District**
District Name	Barber	Waconda	Baldwin City
District Code	D0254	D0272	D0348
County	Barber	Mitchell	Douglas
Enrollment	621	365	1,407
Constraints			
Economically Disadvantaged Students	34.4%	44.3%	15.2%
English Language Learners	0.1%	0.0%	0.1%
Students with Disabilities	12.6%	12.9%	13.7%
Inputs			
Core Spending (per student)	\$8,494	\$9,480	\$6,490
Outputs			
Reading and Math Proficiency Rate	68.8%	94.5%	88.7%
Reading (grades 3-8)	77.2%	96.9%	94.3%
Reading (high school)	73.8%	88.6%	72.2%
Math (grades 3-8)	67.3%	96.6%	94.3%
Math (high school)	46.1%	92.0%	66.1%
Reading and Math Performance Index	38.0%	70.2%	64.0%
Reading (grades 3-8)	44.8%	70.4%	67.4%
Reading (high school)	42.2%	61.8%	44.6%
Math (grades 3-8)	33.5%	77.0%	74.1%
Math (high school)	27.4%	64.0%	40.1%

* Efficient frontier district with most similar constraints as this district.

Kansas School District Efficiency Study

District: Barnes (D0223)

Why was this profile produced?

Governor Sebelius and the Ewing Marion Kauffman Foundation commissioned Standard & Poor's to study the relative efficiency of the state's school districts. A key component of the study is this two-page profile, produced for each of the state's less efficient school districts to provide them with a resource to help in their efforts to become more efficient.

What is a relative efficiency score? What does this district's score mean?

The relative efficiency score is derived by examining the relationship between three variables: **inputs** – how much the district spends per pupil; **outputs** – how well the district's students perform in reading and math; and **constraints** – how many of the district's students have special needs (i.e., economically disadvantaged backgrounds, physical or learning disabilities, or limited English proficiency), which are common factors that are outside of a district's control but can affect its spending and achievement levels.

Using linear mathematics, the district's data are then compared to all other school districts in the state to determine its relative efficiency score. Districts with the highest ratio of outputs to inputs in light of their constraints are considered to be on the efficiency frontier, and receive relative efficiency scores of 100%. Accordingly, they are referred to as **efficient frontier** districts. This district's score means that it is **90.96%** as efficient as the state's most efficient districts, taking into account its particular combination of inputs, outputs, and constraints.

This District's **Relative Efficiency Score = 90.96%**

How could this district improve its efficiency score? As noted above, this district has produced less than 100% of the outputs that might have been expected for its level of inputs and constraints, based on the performance of other districts. Had the district been able to increase its outputs to the target values shown in the accompanying table, while maintaining its current level of inputs, it would have reached the **efficient frontier**.

Output Improvement Targets

Outputs	Actual Value	Target Value*
Proficiency Rate	89.9%	99.2%
Performance Index	60.4%	66.4%

*Had this district achieved the target values, it would have received a 100% relative efficiency score.

Which data are included in the calculation of the district's efficiency score?

Inputs

Core Spending
 (\$ per student spent on core day-to-day operations,

adjusted for local differences in purchasing power)

<u>Constraints</u> (factors outside of the district's control)

- Enrollment of Economically Disadvantaged Students
- Enrollment of English Language Learners
- Enrollment of Students with Disabilities

- Reading and Math Proficiency Rate (percent of reading and math tests scoring at the "proficient" standard or higher)
- Reading and Math Performance Index (an index that goes beyond measuring proficiency by awarding points for all tests that score above the lowest level – "basic", "proficient", "advanced", and "exemplary" – with higher scores awarded more points than lower scores)

Kansas School District Efficiency Study

District: Barnes (D0223)

Region: North Central Kansas (Washington County)

Which Kansas districts are the most efficient?

A total of 21 districts across the state have been identified as **efficient frontier** districts (achieving relative efficiency scores of 100%); these are listed alphabetically in the following table. One (or more) of these districts may serve as the source of promising practices that might be replicated in order to improve this district's performance.

District	<u>County</u>	District	County	District	County
Arkansas City	Cowley	Dodge City	Ford	Lyons	Rice
Ashland	Clark	Gardner-Edgerton	Johnson	Newton	Harvey
Baldwin City	Douglas	Great Bend	Barton	Osawatomie	Miami
Brown County	Brown	Halstead	Harvey	Rolla	Morton
Burlingame	Osage	Kismet-Plains	Seward	Shawnee Mission	Johnson
Deerfield	Kearny	Lansing	Leavenworth	Waconda	Mitchell
DeSoto	Johnson	Leoti	Wichita	West Elk	Elk

How does this district compare to the state's most efficient districts?

The following table compares Barnes with two of the state's **efficient frontier** districts using two different criteria. The first comparison is made to the efficient frontier district with the most similar demographic constraints to this district. The second comparison is made to a similarly-sized efficient frontier district that spends no more than this district and produces the highest overall student performance.

	This	Most Similar Frontier	Best-Performing Frontier
Indicator	District	District*	District**
District Name	Barnes	Waconda	Baldwin City
District Code	D0223	D0272	D0348
County	Washington	Mitchell	Douglas
Enrollment	469	365	1,407
Constraints			
Economically Disadvantaged Students	34.5%	44.3%	15.2%
English Language Learners	0.3%	0.0%	0.1%
Students with Disabilities	14.1%	12.9%	13.7%
Inputs			
Core Spending (per student)	\$8,346	\$9,480	\$6,490
Outputs			
Reading and Math Proficiency Rate	89.9%	94.5%	88.7%
Reading (grades 3-8)	91.6%	96.9%	94.3%
Reading (high school)	94.4%	88.6%	72.2%
Math (grades 3-8)	90.5%	96.6%	94.3%
Math (high school)	83.7%	92.0%	66.1%
Reading and Math Performance Index	60.4%	70.2%	64.0%
Reading (grades 3-8)	59.9%	70.4%	67.4%
Reading (high school)	64.7%	61.8%	44.6%
Math (grades 3-8)	61.3%	77.0%	74.1%
Math (high school)	57.4%	64.0%	40.1%

* Efficient frontier district with most similar constraints as this district.

Kansas School District Efficiency Study

District: Basehor-Linwood (D0458)

Why was this profile produced?

Governor Sebelius and the Ewing Marion Kauffman Foundation commissioned Standard & Poor's to study the relative efficiency of the state's school districts. A key component of the study is this two-page profile, produced for each of the state's less efficient school districts to provide them with a resource to help in their efforts to become more efficient.

What is a relative efficiency score? What does this district's score mean?

The relative efficiency score is derived by examining the relationship between three variables: **inputs** – how much the district spends per pupil; **outputs** – how well the district's students perform in reading and math; and **constraints** – how many of the district's students have special needs (i.e., economically disadvantaged backgrounds, physical or learning disabilities, or limited English proficiency), which are common factors that are outside of a district's control but can affect its spending and achievement levels.

Using linear mathematics, the district's data are then compared to all other school districts in the state to determine its relative efficiency score. Districts with the highest ratio of outputs to inputs in light of their constraints are considered to be on the efficiency frontier, and receive relative efficiency scores of 100%. Accordingly, they are referred to as **efficient frontier** districts. This district's score means that it is **88.65%** as efficient as the state's most efficient districts, taking into account its particular combination of inputs, outputs, and constraints.

This District's **Relative Efficiency Score** = **88.65%**

How could this district improve its efficiency score? As noted above, this district has produced less than 100% of the outputs that might have been expected for its level of inputs and constraints, based on the performance of other districts. Had the district been able to increase its outputs to the target values shown in the accompanying table, while maintaining its current level of inputs, it would have reached the **efficient frontier**.

Output Improvement Targets

Outputs	Actual Value	Target Value*
Proficiency Rate	78.2%	88.2%
Performance Index	51.4%	58.9%

*Had this district achieved the target values, it would have received a 100% relative efficiency score.

Which data are included in the calculation of the district's efficiency score?

Inputs

Core Spending

 (\$ per student spent on core

(\$ per student spent on core day-to-day operations, adjusted for local differences in purchasing power)

Constraints (factors outside of the district's control)

- Enrollment of Economically Disadvantaged Students
- Enrollment of English Language Learners
- Enrollment of Students with Disabilities

- **Reading and Math Proficiency Rate** (percent of reading and math tests scoring at the "proficient" standard or higher)
- Reading and Math Performance Index
 (an index that goes beyond measuring proficiency by awarding points for all tests that score above the lowest level – "basic",
 "proficient", "advanced", and "exemplary" – with higher scores awarded more points than lower scores)

Kansas School District Efficiency Study

District: Basehor-Linwood (D0458)

Region: Northeast Kansas (Leavenworth County)

Which Kansas districts are the most efficient?

A total of 21 districts across the state have been identified as **efficient frontier** districts (achieving relative efficiency scores of 100%); these are listed alphabetically in the following table. One (or more) of these districts may serve as the source of promising practices that might be replicated in order to improve this district's performance.

District	County	District	<u>County</u>	District	County
Arkansas City	Cowley	Dodge City	Ford	Lyons	Rice
Ashland	Clark	Gardner-Edgerton	Johnson	Newton	Harvey
Baldwin City	Douglas	Great Bend	Barton	Osawatomie	Miami
Brown County	Brown	Halstead	Harvey	Rolla	Morton
Burlingame	Osage	Kismet-Plains	Seward	Shawnee Mission	Johnson
Deerfield	Kearny	Lansing	Leavenworth	Waconda	Mitchell
DeSoto	Johnson	Leoti	Wichita	West Elk	Elk

How does this district compare to the state's most efficient districts?

The following table compares Basehor-Linwood with two of the state's **efficient frontier** districts using two different criteria. The first comparison is made to the efficient frontier district with the most similar demographic constraints to this district. The second comparison is made to a similarly-sized efficient frontier district that spends no more than this district and produces the highest overall student performance. In this case, the comparison district under both criteria is the same.

Indicator	This District	Most Similar Frontier District*	Best-Performing Frontier District**
District Name	Basehor- Linwood	Lansing	Lansing
District Code	D0458	D0469	D0469
County	Leavenworth	Leavenworth	Leavenworth
Enrollment	2,118	2,197	2,197
Constraints			
Economically Disadvantaged Students	8.5%	9.1%	9.1%
English Language Learners	0.3%	0.4%	0.4%
Students with Disabilities	10.9%	10.8%	10.8%
Inputs			
Core Spending (per student)	\$5,230	\$4,722	\$4,722
Outputs			
Reading and Math Proficiency Rate	78.2%	82.9%	82.9%
Reading (grades 3-8)	83.0%	87.3%	87.3%
Reading (high school)	73.1%	78.6%	78.6%
Math (grades 3-8)	80.0%	85.5%	85.5%
Math (high school)	61.9%	70.2%	70.2%
Reading and Math Performance Index	51.4%	54.3%	54.3%
Reading (grades 3-8)	55.9%	57.2%	57.2%
Reading (high school)	47.4%	50.9%	50.9%
Math (grades 3-8)	52.9%	57.8%	57.8%
Math (high school) * Efficient frontier district with most similar cons	35.4%	41.5%	41.5%

* Efficient frontier district with most similar constraints as this district.

Kansas School District Efficiency Study

District: Baxter Springs (D0508)

Region: Southeast Kansas (Cherokee County)

Why was this profile produced?

Governor Sebelius and the Ewing Marion Kauffman Foundation commissioned Standard & Poor's to study the relative efficiency of the state's school districts. A key component of the study is this two-page profile, produced for each of the state's less efficient school districts to provide them with a resource to help in their efforts to become more efficient.

What is a relative efficiency score? What does this district's score mean?

The relative efficiency score is derived by examining the relationship between three variables: **inputs** – how much the district spends per pupil; **outputs** – how well the district's students perform in reading and math; and **constraints** – how many of the district's students have special needs (i.e., economically disadvantaged backgrounds, physical or learning disabilities, or limited English proficiency), which are common factors that are outside of a district's control but can affect its spending and achievement levels.

Using linear mathematics, the district's data are then compared to all other school districts in the state to determine its relative efficiency score. Districts with the highest ratio of outputs to inputs in light of their constraints are considered to be on the efficiency frontier, and receive relative efficiency scores of 100%. Accordingly, they are referred to as **efficient frontier** districts. This district's score means that it is **87.50%** as efficient as the state's most efficient districts, taking into account its particular combination of inputs, outputs, and constraints.

This District's **Relative Efficiency Score** = 87.50%

How could this district improve its efficiency score? As noted above, this district has produced less than 100% of the outputs that might have been expected for its level of inputs and constraints, based on the performance of other districts. Had the district been able to increase its outputs to the target values shown in the accompanying table, while maintaining its current level of inputs, it would have reached the **efficient frontier**.

Output Improvement Targets

Outputs	Actual Value	Target Value*
Proficiency Rate	73.6%	84.1%
Performance Index	46.0%	54.3%

*Had this district achieved the target values, it would have received a 100% relative efficiency score.

Which data are included in the calculation of the district's efficiency score?

Inputs

• Core Spending (\$ per student spent on c

(\$ per student spent on core day-to-day operations, adjusted for local differences in purchasing power)

Constraints (factors outside of the district's control)

- Enrollment of Economically Disadvantaged Students
- Enrollment of English Language Learners
- Enrollment of Students with Disabilities

- Reading and Math Proficiency Rate (percent of reading and math tests scoring at the "proficient" standard or higher)
- Reading and Math Performance Index (an index that goes beyond measuring proficiency by awarding points for all tests that score above the lowest level – "basic", "proficient", "advanced", and "exemplary" – with higher scores awarded more points than lower scores)

Kansas School District Efficiency Study

District: Baxter Springs (D0508)

Region: Southeast Kansas (Cherokee County)

Which Kansas districts are the most efficient?

A total of 21 districts across the state have been identified as **efficient frontier** districts (achieving relative efficiency scores of 100%); these are listed alphabetically in the following table. One (or more) of these districts may serve as the source of promising practices that might be replicated in order to improve this district's performance.

District	County	District	<u>County</u>	District	County
Arkansas City	Cowley	Dodge City	Ford	Lyons	Rice
Ashland	Clark	Gardner-Edgerton	Johnson	Newton	Harvey
Baldwin City	Douglas	Great Bend	Barton	Osawatomie	Miami
Brown County	Brown	Halstead	Harvey	Rolla	Morton
Burlingame	Osage	Kismet-Plains	Seward	Shawnee Mission	Johnson
Deerfield	Kearny	Lansing	Leavenworth	Waconda	Mitchell
DeSoto	Johnson	Leoti	Wichita	West Elk	Elk

How does this district compare to the state's most efficient districts?

The following table compares Baxter Springs with two of the state's **efficient frontier** districts using two different criteria. The first comparison is made to the efficient frontier district with the most similar demographic constraints to this district. The second comparison is made to a similarly-sized efficient frontier district that spends no more than this district and produces the highest overall student performance.

Indicator	This District	Most Similar Frontier District*	Best-Performing Frontier District**
District Name	Baxter Springs	Osawatomie	Baldwin City
District Code	D0508	D0367	D0348
County	Cherokee	Miami	Douglas
Enrollment	917	1,235	1,407
Constraints			
Economically Disadvantaged Students	51.4%	50.8%	15.2%
English Language Learners	0.9%	0.0%	0.1%
Students with Disabilities	10.4%	15.3%	13.7%
Inputs			
Core Spending (per student)	\$8,285	\$6,193	\$6,490
Outputs			
Reading and Math Proficiency Rate	73.6%	75.5%	88.7%
Reading (grades 3-8)	76.1%	78.5%	94.3%
Reading (high school)	77.8%	78.4%	72.2%
Math (grades 3-8)	75.7%	81.4%	94.3%
Math (high school)	57.4%	39.7%	66.1%
Reading and Math Performance Index	46.0%	45.7%	64.0%
Reading (grades 3-8)	46.9%	48.0%	67.4%
Reading (high school)	50.0%	43.0%	44.6%
Math (grades 3-8)	48.1%	50.1%	74.1%
Math (high school)	33.5%	22.0%	40.1%

* Efficient frontier district with most similar constraints as this district.

Kansas School District Efficiency Study

District: Belle Plaine (D0357)

Region: South Central Kansas (Sumner County)

Why was this profile produced?

Governor Sebelius and the Ewing Marion Kauffman Foundation commissioned Standard & Poor's to study the relative efficiency of the state's school districts. A key component of the study is this two-page profile, produced for each of the state's less efficient school districts to provide them with a resource to help in their efforts to become more efficient.

What is a relative efficiency score? What does this district's score mean?

The relative efficiency score is derived by examining the relationship between three variables: **inputs** – how much the district spends per pupil; **outputs** – how well the district's students perform in reading and math; and **constraints** – how many of the district's students have special needs (i.e., economically disadvantaged backgrounds, physical or learning disabilities, or limited English proficiency), which are common factors that are outside of a district's control but can affect its spending and achievement levels.

Using linear mathematics, the district's data are then compared to all other school districts in the state to determine its relative efficiency score. Districts with the highest ratio of outputs to inputs in light of their constraints are considered to be on the efficiency frontier, and receive relative efficiency scores of 100%. Accordingly, they are referred to as **efficient frontier** districts. This district's score means that it is **90.87%** as efficient as the state's most efficient districts, taking into account its particular combination of inputs, outputs, and constraints.

This District's **Relative Efficiency Score** = 90.87%

How could this district improve its efficiency score? As noted above, this district has produced less than 100% of the outputs that might have been expected for its level of inputs and constraints, based on the performance of other districts. Had the district been able to increase its outputs to the target values shown in the accompanying table, while maintaining its current level of inputs, it would have reached the **efficient frontier**.

Output Improvement Targets

Outputs	Actual Value	Target Value*
Proficiency Rate	82.0%	90.2%
Performance Index	52.9%	60.0%

*Had this district achieved the target values, it would have received a 100% relative efficiency score.

Which data are included in the calculation of the district's efficiency score?

Inputs

Core Spending
 (\$ per student spent on con-

(\$ per student spent on core day-to-day operations, adjusted for local differences in purchasing power)

<u>Constraints</u> (factors outside of the district's control)

- Enrollment of Economically Disadvantaged Students
- Enrollment of English Language Learners
- Enrollment of Students with Disabilities

- **Reading and Math Proficiency Rate** (percent of reading and math tests scoring at the "proficient" standard or higher)
- Reading and Math Performance Index
 (an index that goes beyond measuring proficiency by awarding points for all tests that score above the lowest level – "basic",
 "proficient", "advanced", and "exemplary" – with higher scores awarded more points than lower scores)

Kansas School District Efficiency Study

District: Belle Plaine (D0357)

Region: South Central Kansas (Sumner County)

Which Kansas districts are the most efficient?

A total of 21 districts across the state have been identified as **efficient frontier** districts (achieving relative efficiency scores of 100%); these are listed alphabetically in the following table. One (or more) of these districts may serve as the source of promising practices that might be replicated in order to improve this district's performance.

District	County	District	<u>County</u>	District	County
Arkansas City	Cowley	Dodge City	Ford	Lyons	Rice
Ashland	Clark	Gardner-Edgerton	Johnson	Newton	Harvey
Baldwin City	Douglas	Great Bend	Barton	Osawatomie	Miami
Brown County	Brown	Halstead	Harvey	Rolla	Morton
Burlingame	Osage	Kismet-Plains	Seward	Shawnee Mission	Johnson
Deerfield	Kearny	Lansing	Leavenworth	Waconda	Mitchell
DeSoto	Johnson	Leoti	Wichita	West Elk	Elk

How does this district compare to the state's most efficient districts?

The following table compares Belle Plaine with two of the state's **efficient frontier** districts using two different criteria. The first comparison is made to the efficient frontier district with the most similar demographic constraints to this district. The second comparison is made to a similarly-sized efficient frontier district that spends no more than this district and produces the highest overall student performance.

Indicator	This District	Most Similar Frontier District*	Best-Performing Frontier District**
District Name	Belle Plaine	Halstead	Baldwin City
District Code	D0357	D0440	D0348
County	Sumner	Harvey	Douglas
Enrollment	796	735	1,407
Constraints			
Economically Disadvantaged Students	35.9%	34.7%	15.2%
English Language Learners	0.2%	0.0%	0.1%
Students with Disabilities	18.4%	18.7%	13.7%
Inputs			
Core Spending (per student)	\$7,817	\$6,792	\$6,490
Outputs			
Reading and Math Proficiency Rate	82.0%	83.9%	88.7%
Reading (grades 3-8)	87.2%	87.0%	94.3%
Reading (high school)	82.5%	83.8%	72.2%
Math (grades 3-8)	83.4%	86.3%	94.3%
Math (high school)	64.8%	64.0%	66.1%
Reading and Math Performance Index	52.9%	55.8%	64.0%
Reading (grades 3-8)	57.3%	56.7%	67.4%
Reading (high school)	47.1%	55.3%	44.6%
Math (grades 3-8)	56.4%	59.6%	74.1%
Math (high school)	37.6%	41.1%	40.1%

* Efficient frontier district with most similar constraints as this district.

Kansas School District Efficiency Study

District: Belleville (D0427)

Region: North Central Kansas (Republic County)

Why was this profile produced?

Governor Sebelius and the Ewing Marion Kauffman Foundation commissioned Standard & Poor's to study the relative efficiency of the state's school districts. A key component of the study is this two-page profile, produced for each of the state's less efficient school districts to provide them with a resource to help in their efforts to become more efficient.

What is a relative efficiency score? What does this district's score mean?

The relative efficiency score is derived by examining the relationship between three variables: **inputs** – how much the district spends per pupil; **outputs** – how well the district's students perform in reading and math; and **constraints** – how many of the district's students have special needs (i.e., economically disadvantaged backgrounds, physical or learning disabilities, or limited English proficiency), which are common factors that are outside of a district's control but can affect its spending and achievement levels.

Using linear mathematics, the district's data are then compared to all other school districts in the state to determine its relative efficiency score. Districts with the highest ratio of outputs to inputs in light of their constraints are considered to be on the efficiency frontier, and receive relative efficiency scores of 100%. Accordingly, they are referred to as **efficient frontier** districts. This district's score means that it is **82.59%** as efficient as the state's most efficient districts, taking into account its particular combination of inputs, outputs, and constraints.

This District's **Relative Efficiency Score** = 82.59%

How could this district improve its efficiency score? As noted above, this district has produced less than 100% of the outputs that might have been expected for its level of inputs and constraints, based on the performance of other districts. Had the district been able to increase its outputs to the target values shown in the accompanying table, while maintaining its current level of inputs, it would have reached the **efficient frontier**.

Output Improvement Targets

Outputs	Actual Value	Target Value*
Proficiency Rate	79.5%	96.3%
Performance Index	47.4%	62.8%

*Had this district achieved the target values, it would have received a 100% relative efficiency score.

Which data are included in the calculation of the district's efficiency score?

Inputs

Core Spending
 (\$ per student spent on c

(\$ per student spent on core day-to-day operations, adjusted for local differences in purchasing power)

<u>Constraints</u> (factors outside of the district's control)

- Enrollment of Economically Disadvantaged Students
- Enrollment of English Language Learners
- Enrollment of Students with Disabilities

- **Reading and Math Proficiency Rate** (percent of reading and math tests scoring at the "proficient" standard or higher)
- Reading and Math Performance Index
 (an index that goes beyond measuring proficiency by awarding points for all tests that score above the lowest level – "basic",
 "proficient", "advanced", and "exemplary" – with higher scores awarded more points than lower scores)

Kansas School District Efficiency Study

District: Belleville (D0427)

Region: North Central Kansas (Republic County)

Which Kansas districts are the most efficient?

A total of 21 districts across the state have been identified as **efficient frontier** districts (achieving relative efficiency scores of 100%); these are listed alphabetically in the following table. One (or more) of these districts may serve as the source of promising practices that might be replicated in order to improve this district's performance.

District	<u>County</u>	District	<u>County</u>	District	County
Arkansas City	Cowley	Dodge City	Ford	Lyons	Rice
Ashland	Clark	Gardner-Edgerton	Johnson	Newton	Harvey
Baldwin City	Douglas	Great Bend	Barton	Osawatomie	Miami
Brown County	Brown	Halstead	Harvey	Rolla	Morton
Burlingame	Osage	Kismet-Plains	Seward	Shawnee Mission	Johnson
Deerfield	Kearny	Lansing	Leavenworth	Waconda	Mitchell
DeSoto	Johnson	Leoti	Wichita	West Elk	Elk

How does this district compare to the state's most efficient districts?

The following table compares Belleville with two of the state's **efficient frontier** districts using two different criteria. The first comparison is made to the efficient frontier district with the most similar demographic constraints to this district. The second comparison is made to a similarly-sized efficient frontier district that spends no more than this district and produces the highest overall student performance.

		Most Similar	Best-Performing
Indicator	This District	Frontier District*	Frontier District**
District Name	Belleville	Burlingame	Waconda
District Code	D0427	D0454	D0272
County	Republic	Osage	Mitchell
Enrollment	462	351	365
Constraints			
Economically Disadvantaged Students	37.3%	31.1%	44.3%
English Language Learners	0.0%	0.0%	0.0%
Students with Disabilities	23.0%	21.6%	12.9%
Inputs			
Core Spending (per student)	\$11,330	\$6,794	\$9,480
Outputs			
Reading and Math Proficiency Rate	79.5%	81.6%	94.5%
Reading (grades 3-8)	83.2%	82.1%	96.9%
Reading (high school)	78.9%	72.1%	88.6%
Math (grades 3-8)	81.8%	87.5%	96.6%
Math (high school)	67.1%	64.5%	92.0%
Reading and Math Performance Index	47.4%	48.3%	70.2%
Reading (grades 3-8)	49.5%	47.4%	70.4%
Reading (high school)	53.0%	40.8%	61.8%
Math (grades 3-8)	47.5%	53.7%	77.0%
Math (high school)	40.5%	35.7%	64.0%

* Efficient frontier district with most similar constraints as this district.

Kansas School District Efficiency Study

District: Beloit (D0273)

Region: North Central Kansas (Mitchell County)

Why was this profile produced?

Governor Sebelius and the Ewing Marion Kauffman Foundation commissioned Standard & Poor's to study the relative efficiency of the state's school districts. A key component of the study is this two-page profile, produced for each of the state's less efficient school districts to provide them with a resource to help in their efforts to become more efficient.

What is a relative efficiency score? What does this district's score mean?

The relative efficiency score is derived by examining the relationship between three variables: **inputs** – how much the district spends per pupil; **outputs** – how well the district's students perform in reading and math; and **constraints** – how many of the district's students have special needs (i.e., economically disadvantaged backgrounds, physical or learning disabilities, or limited English proficiency), which are common factors that are outside of a district's control but can affect its spending and achievement levels.

Using linear mathematics, the district's data are then compared to all other school districts in the state to determine its relative efficiency score. Districts with the highest ratio of outputs to inputs in light of their constraints are considered to be on the efficiency frontier, and receive relative efficiency scores of 100%. Accordingly, they are referred to as **efficient frontier** districts. This district's score means that it is **74.91%** as efficient as the state's most efficient districts, taking into account its particular combination of inputs, outputs, and constraints.

This District's **Relative Efficiency Score** = 74.91%

How could this district improve its efficiency score? As noted above, this district has produced less than 100% of the outputs that might have been expected for its level of inputs and constraints, based on the performance of other districts. Had the district been able to increase its outputs to the target values shown in the accompanying table, while maintaining its current level of inputs, it would have reached the **efficient frontier**. This district's unattainable proficiency output target (greater than 100%) indicates that reaching the efficient frontier would also require reducing inputs; improving outputs alone would not be sufficient.

Output Improvement Targets

Outputs	Actual Value	Target Value*
Proficiency Rate	75.9%	>100%
Performance Index	47.9%	63.9%

*Had this district achieved the target values, it would have received a 100% relative efficiency score.

Note: A target value of ">100%" indicates that output improvements alone are not sufficient; input reductions are also necessary.

Which data are included in the calculation of the district's efficiency score?

Inputs

- **Outputs**
- Core Spending
 (\$ per student spent on core day-to-day operations, adjusted for local differences in purchasing power)

Constraints (factors outside of the district's control)

- Enrollment of Economically Disadvantaged Students
- Enrollment of English Language Learners
- Enrollment of Students with Disabilities

- **Reading and Math Proficiency Rate** (percent of reading and math tests scoring at the "proficient" standard or higher)
- Reading and Math Performance Index

 (an index that goes beyond measuring proficiency by awarding points for all tests that score above the lowest level "basic",
 "proficient", "advanced", and "exemplary" with higher scores awarded more points than lower scores)

Electronic copy available at: https://ssrn.com/abstract=2355427

Kansas School District Efficiency Study

District: Beloit (D0273)

Region: North Central Kansas (Mitchell County)

Which Kansas districts are the most efficient?

A total of 21 districts across the state have been identified as **efficient frontier** districts (achieving relative efficiency scores of 100%); these are listed alphabetically in the following table. One (or more) of these districts may serve as the source of promising practices that might be replicated in order to improve this district's performance.

District	County	District	<u>County</u>	District	County
Arkansas City	Cowley	Dodge City	Ford	Lyons	Rice
Ashland	Clark	Gardner-Edgerton	Johnson	Newton	Harvey
Baldwin City	Douglas	Great Bend	Barton	Osawatomie	Miami
Brown County	Brown	Halstead	Harvey	Rolla	Morton
Burlingame	Osage	Kismet-Plains	Seward	Shawnee Mission	Johnson
Deerfield	Kearny	Lansing	Leavenworth	Waconda	Mitchell
DeSoto	Johnson	Leoti	Wichita	West Elk	Elk

How does this district compare to the state's most efficient districts?

The following table compares Beloit with two of the state's **efficient frontier** districts using two different criteria. The first comparison is made to the efficient frontier district with the most similar demographic constraints to this district. The second comparison is made to a similarly-sized efficient frontier district that spends no more than this district and produces the highest overall student performance.

		Most Similar	Best-Performing
	This	Frontier	Frontier
Indicator	District	District*	District**
District Name	Beloit	Halstead	Baldwin City
District Code	D0273	D0440	D0348
County	Mitchell	Harvey	Douglas
Enrollment	803	735	1,407
Constraints			
Economically Disadvantaged Students	29.8%	34.7%	15.2%
English Language Learners	0.1%	0.0%	0.1%
Students with Disabilities	16.3%	18.7%	13.7%
Inputs			
Core Spending (per student)	\$8,795	\$6,792	\$6,490
Outputs			
Reading and Math Proficiency Rate	75.9%	83.9%	88.7%
Reading (grades 3-8)	79.9%	87.0%	94.3%
Reading (high school)	72.9%	83.8%	72.2%
Math (grades 3-8)	77.9%	86.3%	94.3%
Math (high school)	59.2%	64.0%	66.1%
Reading and Math Performance Index	47.9%	55.8%	64.0%
Reading (grades 3-8)	52.9%	56.7%	67.4%
Reading (high school)	43.4%	55.3%	44.6%
Math (grades 3-8)	47.6%	59.6%	74.1%
Math (high school)	36.8%	41.1%	40.1%

* Efficient frontier district with most similar constraints as this district.

Kansas School District Efficiency Study

District: Blue Valley (D0384)

Region: North Central Kansas (Riley County)

Why was this profile produced?

Governor Sebelius and the Ewing Marion Kauffman Foundation commissioned Standard & Poor's to study the relative efficiency of the state's school districts. A key component of the study is this two-page profile, produced for each of the state's less efficient school districts to provide them with a resource to help in their efforts to become more efficient.

What is a relative efficiency score? What does this district's score mean?

The relative efficiency score is derived by examining the relationship between three variables: **inputs** – how much the district spends per pupil; **outputs** – how well the district's students perform in reading and math; and **constraints** – how many of the district's students have special needs (i.e., economically disadvantaged backgrounds, physical or learning disabilities, or limited English proficiency), which are common factors that are outside of a district's control but can affect its spending and achievement levels.

Using linear mathematics, the district's data are then compared to all other school districts in the state to determine its relative efficiency score. Districts with the highest ratio of outputs to inputs in light of their constraints are considered to be on the efficiency frontier, and receive relative efficiency scores of 100%. Accordingly, they are referred to as **efficient frontier** districts. This district's score means that it is **64.89%** as efficient as the state's most efficient districts, taking into account its particular combination of inputs, outputs, and constraints.

This District's **Relative Efficiency Score** = 64.89%

How could this district improve its efficiency score? As noted above, this district has produced less than 100% of the outputs that might have been expected for its level of inputs and constraints, based on the performance of other districts. Had the district been able to increase its outputs to the target values shown in the accompanying table, while maintaining its current level of inputs, it would have reached the **efficient frontier**. This district's unattainable proficiency output target (greater than 100%) indicates that reaching the efficient frontier would also require reducing inputs; improving outputs alone would not be sufficient.

Output Improvement Targets

Outputs	Actual Value	Target Value*
Proficiency Rate	74.5%	>100%
Performance Index	47.4%	76.2%

*Had this district achieved the target values, it would have received a 100% relative efficiency score.

Note: A target value of ">100%" indicates that output improvements alone are not sufficient; input reductions are also necessary.

Which data are included in the calculation of the district's efficiency score?

Inputs

- **Outputs**
- Core Spending
 (\$ per student spent on core day-to-day operations, adjusted for local differences in purchasing power)

Constraints (factors outside of the district's control)

- Enrollment of Economically Disadvantaged Students
- Enrollment of English Language Learners
- Enrollment of Students with Disabilities

- **Reading and Math Proficiency Rate** (percent of reading and math tests scoring at the "proficient" standard or higher)
- Reading and Math Performance Index

 (an index that goes beyond measuring proficiency by awarding points for all tests that score above the lowest level "basic",
 "proficient", "advanced", and "exemplary" with higher scores awarded more points than lower scores)

Electronic copy available at: https://ssrn.com/abstract=2355427

Kansas School District Efficiency Study

District: Blue Valley (D0384)

Region: North Central Kansas (Riley County)

Which Kansas districts are the most efficient?

A total of 21 districts across the state have been identified as **efficient frontier** districts (achieving relative efficiency scores of 100%); these are listed alphabetically in the following table. One (or more) of these districts may serve as the source of promising practices that might be replicated in order to improve this district's performance.

District	County	District	<u>County</u>	District	County
Arkansas City	Cowley	Dodge City	Ford	Lyons	Rice
Ashland	Clark	Gardner-Edgerton	Johnson	Newton	Harvey
Baldwin City	Douglas	Great Bend	Barton	Osawatomie	Miami
Brown County	Brown	Halstead	Harvey	Rolla	Morton
Burlingame	Osage	Kismet-Plains	Seward	Shawnee Mission	Johnson
Deerfield	Kearny	Lansing	Leavenworth	Waconda	Mitchell
DeSoto	Johnson	Leoti	Wichita	West Elk	Elk

How does this district compare to the state's most efficient districts?

The following table compares Blue Valley with two of the state's **efficient frontier** districts using two different criteria. The first comparison is made to the efficient frontier district with the most similar demographic constraints to this district. The second comparison is made to a similarly-sized efficient frontier district that spends no more than this district and produces the highest overall student performance.

	This	Most Similar Frontier	Best-Performing Frontier
Indicator	District	District*	District**
District Name	Blue Valley	Burlingame	Waconda
District Code	D0384	D0454	D0272
County	Riley	Osage	Mitchell
Enrollment	234	351	365
Constraints			
Economically Disadvantaged Students	23.5%	31.1%	44.3%
English Language Learners	0.5%	0.0%	0.0%
Students with Disabilities	15.6%	21.6%	12.9%
Inputs			
Core Spending (per student)	\$11,006	\$6,794	\$9,480
Outputs			
Reading and Math Proficiency Rate	74.5%	81.6%	94.5%
Reading (grades 3-8)	74.6%	82.1%	96.9%
Reading (high school)	81.7%	72.1%	88.6%
Math (grades 3-8)	76.3%	87.5%	96.6%
Math (high school)	67.4%	64.5%	92.0%
Reading and Math Performance Index	47.4%	48.3%	70.2%
Reading (grades 3-8)	49.0%	47.4%	70.4%
Reading (high school)	55.8%	40.8%	61.8%
Math (grades 3-8)	48.8%	53.7%	77.0%
Math (high school)	32.6%	35.7%	64.0%

* Efficient frontier district with most similar constraints as this district.

Kansas School District Efficiency Study

District: Blue Valley (D0229)

Region: Northeast Kansas (Johnson County)

Why was this profile produced?

Governor Sebelius and the Ewing Marion Kauffman Foundation commissioned Standard & Poor's to study the relative efficiency of the state's school districts. A key component of the study is this two-page profile, produced for each of the state's less efficient school districts to provide them with a resource to help in their efforts to become more efficient.

What is a relative efficiency score? What does this district's score mean?

The relative efficiency score is derived by examining the relationship between three variables: **inputs** – how much the district spends per pupil; **outputs** – how well the district's students perform in reading and math; and **constraints** – how many of the district's students have special needs (i.e., economically disadvantaged backgrounds, physical or learning disabilities, or limited English proficiency), which are common factors that are outside of a district's control but can affect its spending and achievement levels.

Using linear mathematics, the district's data are then compared to all other school districts in the state to determine its relative efficiency score. Districts with the highest ratio of outputs to inputs in light of their constraints are considered to be on the efficiency frontier, and receive relative efficiency scores of 100%. Accordingly, they are referred to as **efficient frontier** districts. This district's score means that it is **99.38%** as efficient as the state's most efficient districts, taking into account its particular combination of inputs, outputs, and constraints.

This District's **Relative Efficiency Score = 99.38%**

How could this district improve its efficiency score? As noted above, this district has produced less than 100% of the outputs that might have been expected for its level of inputs and constraints, based on the performance of other districts. Had the district been able to increase its outputs to the target values shown in the accompanying table, while maintaining its current level of inputs, it would have reached the **efficient frontier**.

Output Improvement Targets

Outputs	Actual Value	Target Value*
Proficiency Rate	88.7%	94.4%
Performance Index	62.2%	62.6%

*Had this district achieved the target values, it would have received a 100% relative efficiency score.

Which data are included in the calculation of the district's efficiency score?

Inputs

Core Spending

 (\$ per student spent on core

(\$ per student spent on core day-to-day operations, adjusted for local differences in purchasing power)

Constraints (factors outside of the district's control)

- Enrollment of Economically Disadvantaged Students
- Enrollment of English Language Learners
- Enrollment of Students with Disabilities

- **Reading and Math Proficiency Rate** (percent of reading and math tests scoring at the "proficient" standard or higher)
- Reading and Math Performance Index

 (an index that goes beyond measuring proficiency by awarding points for all tests that score above the lowest level "basic",
 "proficient", "advanced", and "exemplary" with higher scores awarded more points than lower scores)

Kansas School District Efficiency Study

District: Blue Valley (D0229)

Region: Northeast Kansas (Johnson County)

Which Kansas districts are the most efficient?

A total of 21 districts across the state have been identified as **efficient frontier** districts (achieving relative efficiency scores of 100%); these are listed alphabetically in the following table. One (or more) of these districts may serve as the source of promising practices that might be replicated in order to improve this district's performance.

District	County	District	<u>County</u>	District	County
Arkansas City	Cowley	Dodge City	Ford	Lyons	Rice
Ashland	Clark	Gardner-Edgerton	Johnson	Newton	Harvey
Baldwin City	Douglas	Great Bend	Barton	Osawatomie	Miami
Brown County	Brown	Halstead	Harvey	Rolla	Morton
Burlingame	Osage	Kismet-Plains	Seward	Shawnee Mission	Johnson
Deerfield	Kearny	Lansing	Leavenworth	Waconda	Mitchell
DeSoto	Johnson	Leoti	Wichita	West Elk	Elk

How does this district compare to the state's most efficient districts?

The following table compares Blue Valley with two of the state's **efficient frontier** districts using two different criteria. The first comparison is made to the efficient frontier district with the most similar demographic constraints to this district. The second comparison is made to a similarly-sized efficient frontier district that spends no more than this district and produces the highest overall student performance. In this case, the comparison district under both criteria is the same.

Indicator	This District	Most Similar Frontier District*	Best-Performing Frontier District**
District Name	Blue Valley	Shawnee Mission	Shawnee Mission
District Code	D0229	D0512	D0512
County	Johnson	Johnson	Johnson
Enrollment	19,736	28,667	28,667
Constraints			
Economically Disadvantaged Students	3.2%	16.2%	16.2%
English Language Learners	1.3%	4.7%	4.7%
Students with Disabilities	9.3%	15.2%	15.2%
Inputs			
Core Spending (per student)	\$5,906	\$5,728	\$5,728
Outputs			
Reading and Math Proficiency Rate	88.7%	81.4%	81.4%
Reading (grades 3-8)	91.8%	84.0%	84.0%
Reading (high school)	86.0%	83.6%	83.6%
Math (grades 3-8)	90.1%	82.9%	82.9%
Math (high school)	77.0%	70.4%	70.4%
Reading and Math Performance Index	62.2%	55.3%	55.3%
Reading (grades 3-8)	65.2%	56.8%	56.8%
Reading (high school)	59.2%	56.3%	56.3%
Math (grades 3-8)	63.6%	57.5%	57.5%
Math (high school)	52.5%	46.2%	46.2%

* Efficient frontier district with most similar constraints as this district.

Kansas School District Efficiency Study

District: Bonner Springs (D0204)

Why was this profile produced?

Governor Sebelius and the Ewing Marion Kauffman Foundation commissioned Standard & Poor's to study the relative efficiency of the state's school districts. A key component of the study is this two-page profile, produced for each of the state's less efficient school districts to provide them with a resource to help in their efforts to become more efficient.

What is a relative efficiency score? What does this district's score mean?

The relative efficiency score is derived by examining the relationship between three variables: **inputs** – how much the district spends per pupil; **outputs** – how well the district's students perform in reading and math; and **constraints** – how many of the district's students have special needs (i.e., economically disadvantaged backgrounds, physical or learning disabilities, or limited English proficiency), which are common factors that are outside of a district's control but can affect its spending and achievement levels.

Using linear mathematics, the district's data are then compared to all other school districts in the state to determine its relative efficiency score. Districts with the highest ratio of outputs to inputs in light of their constraints are considered to be on the efficiency frontier, and receive relative efficiency scores of 100%. Accordingly, they are referred to as **efficient frontier** districts. This district's score means that it is **94.78%** as efficient as the state's most efficient districts, taking into account its particular combination of inputs, outputs, and constraints.

This District's **Relative Efficiency Score** = 94.78%

How could this district improve its efficiency score? As noted above, this district has produced less than 100% of the outputs that might have been expected for its level of inputs and constraints, based on the performance of other districts. Had the district been able to increase its outputs to the target values shown in the accompanying table, while maintaining its current level of inputs, it would have reached the **efficient frontier**.

Output Improvement Targets

Outputs	Actual Value	Target Value*
Proficiency Rate	68.0%	71.8%
Performance Index	40.7%	48.6%

*Had this district achieved the target values, it would have received a 100% relative efficiency score.

Which data are included in the calculation of the district's efficiency score?

Inputs

Core Spending
 (\$ per student spent on core day-to-day operations,

adjusted for local differences in purchasing power)

Constraints (factors outside of the district's control)

- Enrollment of Economically Disadvantaged Students
- Enrollment of English Language Learners
- Enrollment of Students with Disabilities

- Reading and Math Proficiency Rate (percent of reading and math tests scoring at the "proficient" standard or higher)
- Reading and Math Performance Index (an index that goes beyond measuring proficiency by awarding points for all tests that score above the lowest level – "basic", "proficient", "advanced", and "exemplary" – with higher scores awarded more points than lower scores)

Kansas School District Efficiency Study

District: Bonner Springs (D0204)

Region: Northeast Kansas (Wyandotte County)

Which Kansas districts are the most efficient?

A total of 21 districts across the state have been identified as **efficient frontier** districts (achieving relative efficiency scores of 100%); these are listed alphabetically in the following table. One (or more) of these districts may serve as the source of promising practices that might be replicated in order to improve this district's performance.

District	County	District	<u>County</u>	District	County
Arkansas City	Cowley	Dodge City	Ford	Lyons	Rice
Ashland	Clark	Gardner-Edgerton	Johnson	Newton	Harvey
Baldwin City	Douglas	Great Bend	Barton	Osawatomie	Miami
Brown County	Brown	Halstead	Harvey	Rolla	Morton
Burlingame	Osage	Kismet-Plains	Seward	Shawnee Mission	Johnson
Deerfield	Kearny	Lansing	Leavenworth	Waconda	Mitchell
DeSoto	Johnson	Leoti	Wichita	West Elk	Elk

How does this district compare to the state's most efficient districts?

The following table compares Bonner Springs with two of the state's **efficient frontier** districts using two different criteria. The first comparison is made to the efficient frontier district with the most similar demographic constraints to this district. The second comparison is made to a similarly-sized efficient frontier district that spends no more than this district and produces the highest overall student performance.

	This	Most Similar Frontier	Best-Performing Frontier
Indicator	District	District*	District**
District Name	Bonner Springs	Newton	Gardner-Edgerton
District Code	D0204	D0373	D0231
County	Wyandotte	Harvey	Johnson
Enrollment	2,298	3,731	3,782
Constraints			
Economically Disadvantaged Students	32.2%	45.5%	21.5%
English Language Learners	4.0%	5.9%	0.9%
Students with Disabilities	10.6%	15.4%	12.2%
Inputs			
Core Spending (per student)	\$5,357	\$5,915	\$5,565
Outputs			
Reading and Math Proficiency Rate	68.0%	75.1%	89.0%
Reading (grades 3-8)	76.8%	80.8%	88.9%
Reading (high school)	72.7%	72.8%	87.6%
Math (grades 3-8)	67.2%	76.7%	92.0%
Math (high school)	37.7%	55.1%	78.7%
Reading and Math Performance Index	40.7%	50.6%	61.5%
Reading (grades 3-8)	46.0%	54.7%	59.6%
Reading (high school)	41.6%	48.1%	63.8%
Math (grades 3-8)	40.9%	52.2%	65.9%
Math (high school)	21.9%	36.5%	50.3%

* Efficient frontier district with most similar constraints as this district.

Kansas School District Efficiency Study

District: Bucklin (D0459)

Region: Southwest Kansas (Ford County)

Why was this profile produced?

Governor Sebelius and the Ewing Marion Kauffman Foundation commissioned Standard & Poor's to study the relative efficiency of the state's school districts. A key component of the study is this two-page profile, produced for each of the state's less efficient school districts to provide them with a resource to help in their efforts to become more efficient.

What is a relative efficiency score? What does this district's score mean?

The relative efficiency score is derived by examining the relationship between three variables: **inputs** – how much the district spends per pupil; **outputs** – how well the district's students perform in reading and math; and **constraints** – how many of the district's students have special needs (i.e., economically disadvantaged backgrounds, physical or learning disabilities, or limited English proficiency), which are common factors that are outside of a district's control but can affect its spending and achievement levels.

Using linear mathematics, the district's data are then compared to all other school districts in the state to determine its relative efficiency score. Districts with the highest ratio of outputs to inputs in light of their constraints are considered to be on the efficiency frontier, and receive relative efficiency scores of 100%. Accordingly, they are referred to as **efficient frontier** districts. This district's score means that it is **82.25%** as efficient as the state's most efficient districts, taking into account its particular combination of inputs, outputs, and constraints.

This District's **Relative Efficiency Score** = 82.25%

How could this district improve its efficiency score? As noted above, this district has produced less than 100% of the outputs that might have been expected for its level of inputs and constraints, based on the performance of other districts. Had the district been able to increase its outputs to the target values shown in the accompanying table, while maintaining its current level of inputs, it would have reached the **efficient frontier**.

Output Improvement Targets

Outputs	Actual Value	Target Value*
Proficiency Rate	76.0%	92.4%
Performance Index	45.6%	59.6%

*Had this district achieved the target values, it would have received a 100% relative efficiency score.

Which data are included in the calculation of the district's efficiency score?

Inputs

Core Spending

 (\$ per student spent on cor

(\$ per student spent on core day-to-day operations, adjusted for local differences in purchasing power)

Constraints (factors outside of the district's control)

- Enrollment of Economically Disadvantaged Students
- Enrollment of English Language Learners
- Enrollment of Students with Disabilities

- **Reading and Math Proficiency Rate** (percent of reading and math tests scoring at the "proficient" standard or higher)
- Reading and Math Performance Index
 (an index that goes beyond measuring proficiency by awarding points for all tests that score above the lowest level – "basic",
 "proficient", "advanced", and "exemplary" – with higher scores awarded more points than lower scores)

Kansas School District Efficiency Study

District: Bucklin (D0459)

Region: Southwest Kansas (Ford County)

Which Kansas districts are the most efficient?

A total of 21 districts across the state have been identified as **efficient frontier** districts (achieving relative efficiency scores of 100%); these are listed alphabetically in the following table. One (or more) of these districts may serve as the source of promising practices that might be replicated in order to improve this district's performance.

District	<u>County</u>	District	<u>County</u>	District	County
Arkansas City	Cowley	Dodge City	Ford	Lyons	Rice
Ashland	Clark	Gardner-Edgerton	Johnson	Newton	Harvey
Baldwin City	Douglas	Great Bend	Barton	Osawatomie	Miami
Brown County	Brown	Halstead	Harvey	Rolla	Morton
Burlingame	Osage	Kismet-Plains	Seward	Shawnee Mission	Johnson
Deerfield	Kearny	Lansing	Leavenworth	Waconda	Mitchell
DeSoto	Johnson	Leoti	Wichita	West Elk	Elk

How does this district compare to the state's most efficient districts?

The following table compares Bucklin with two of the state's **efficient frontier** districts using two different criteria. The first comparison is made to the efficient frontier district with the most similar demographic constraints to this district. The second comparison is made to a similarly-sized efficient frontier district that spends no more than this district and produces the highest overall student performance.

	This	Most Similar Frontier	Best-Performing Frontier
Indicator	District	District*	District**
District Name	Bucklin	Ashland	Waconda
District Code	D0459	D0220	D0272
County	Ford	Clark	Mitchell
Enrollment	261	217	365
Constraints			
Economically Disadvantaged Students	41.9%	50.3%	44.3%
English Language Learners	7.8%	6.0%	0.0%
Students with Disabilities	14.9%	16.1%	12.9%
Inputs			
Core Spending (per student)	\$9,198	\$11,034	\$9,480
Outputs			
Reading and Math Proficiency Rate	76.0%	86.3%	94.5%
Reading (grades 3-8)	70.2%	82.5%	96.9%
Reading (high school)	73.9%	92.3%	88.6%
Math (grades 3-8)	84.5%	90.3%	96.6%
Math (high school)	70.7%	81.0%	92.0%
Reading and Math Performance Index	45.6%	64.2%	70.2%
Reading (grades 3-8)	41.4%	59.5%	70.4%
Reading (high school)	43.6%	65.1%	61.8%
Math (grades 3-8)	51.1%	71.7%	77.0%
Math (high school)	44.4%	51.3%	64.0%

* Efficient frontier district with most similar constraints as this district.

Kansas School District Efficiency Study

District: Buhler (D0313)

Region: South Central Kansas (Reno County)

Why was this profile produced?

Governor Sebelius and the Ewing Marion Kauffman Foundation commissioned Standard & Poor's to study the relative efficiency of the state's school districts. A key component of the study is this two-page profile, produced for each of the state's less efficient school districts to provide them with a resource to help in their efforts to become more efficient.

What is a relative efficiency score? What does this district's score mean?

The relative efficiency score is derived by examining the relationship between three variables: **inputs** – how much the district spends per pupil; **outputs** – how well the district's students perform in reading and math; and **constraints** – how many of the district's students have special needs (i.e., economically disadvantaged backgrounds, physical or learning disabilities, or limited English proficiency), which are common factors that are outside of a district's control but can affect its spending and achievement levels.

Using linear mathematics, the district's data are then compared to all other school districts in the state to determine its relative efficiency score. Districts with the highest ratio of outputs to inputs in light of their constraints are considered to be on the efficiency frontier, and receive relative efficiency scores of 100%. Accordingly, they are referred to as **efficient frontier** districts. This district's score means that it is **83.86%** as efficient as the state's most efficient districts, taking into account its particular combination of inputs, outputs, and constraints.

This District's **Relative Efficiency Score** = 83.86%

How could this district improve its efficiency score? As noted above, this district has produced less than 100% of the outputs that might have been expected for its level of inputs and constraints, based on the performance of other districts. Had the district been able to increase its outputs to the target values shown in the accompanying table, while maintaining its current level of inputs, it would have reached the **efficient frontier**.

Output Improvement Targets

Outputs	Actual Value	Target Value*
Proficiency Rate	80.3%	95.8%
Performance Index	52.3%	65.0%

*Had this district achieved the target values, it would have received a 100% relative efficiency score.

Which data are included in the calculation of the district's efficiency score?

<u>Inputs</u>

Core Spending
 (\$ per student spent on core day-to-day operations,

adjusted for local differences in purchasing power)

Constraints (factors outside of the district's control)

- Enrollment of Economically Disadvantaged Students
- Enrollment of English Language Learners
- Enrollment of Students with Disabilities

- Reading and Math Proficiency Rate (percent of reading and math tests scoring at the "proficient" standard or higher)
- Reading and Math Performance Index (an index that goes beyond measuring proficiency by awarding points for all tests that score above the lowest level – "basic", "proficient", "advanced", and "exemplary" – with higher scores awarded more points than lower scores)

Kansas School District Efficiency Study

District: Buhler (D0313)

Region: South Central Kansas (Reno County)

Which Kansas districts are the most efficient?

A total of 21 districts across the state have been identified as **efficient frontier** districts (achieving relative efficiency scores of 100%); these are listed alphabetically in the following table. One (or more) of these districts may serve as the source of promising practices that might be replicated in order to improve this district's performance.

District	<u>County</u>	District	<u>County</u>	District	County
Arkansas City	Cowley	Dodge City	Ford	Lyons	Rice
Ashland	Clark	Gardner-Edgerton	Johnson	Newton	Harvey
Baldwin City	Douglas	Great Bend	Barton	Osawatomie	Miami
Brown County	Brown	Halstead	Harvey	Rolla	Morton
Burlingame	Osage	Kismet-Plains	Seward	Shawnee Mission	Johnson
Deerfield	Kearny	Lansing	Leavenworth	Waconda	Mitchell
DeSoto	Johnson	Leoti	Wichita	West Elk	Elk

How does this district compare to the state's most efficient districts?

The following table compares Buhler with two of the state's **efficient frontier** districts using two different criteria. The first comparison is made to the efficient frontier district with the most similar demographic constraints to this district. The second comparison is made to a similarly-sized efficient frontier district that spends no more than this district and produces the highest overall student performance. In this case, the comparison district under both criteria is the same.

Indicator	This District	Most Similar Frontier District*	Best-Performing Frontier District**
District Name	Buhler	Gardner- Edgerton	Gardner-Edgerton
District Code	D0313	D0231	D0231
County	Reno	Johnson	Johnson
Enrollment	2,255	3,782	3,782
Constraints			
Economically Disadvantaged Students	29.4%	21.5%	21.5%
English Language Learners	0.9%	0.9%	0.9%
Students with Disabilities	11.2%	12.2%	12.2%
Inputs			
Core Spending (per student)	\$7,108	\$5,565	\$5,565
Outputs			
Reading and Math Proficiency Rate	80.3%	89.0%	89.0%
Reading (grades 3-8)	86.5%	88.9%	88.9%
Reading (high school)	74.9%	87.6%	87.6%
Math (grades 3-8)	81.3%	92.0%	92.0%
Math (high school)	60.2%	78.7%	78.7%
Reading and Math Performance Index	52.3%	61.5%	61.5%
Reading (grades 3-8)	56.7%	59.6%	59.6%
Reading (high school)	47.7%	63.8%	63.8%
Math (grades 3-8)	52.6%	65.9%	65.9%
Math (high school)	38.5%	50.3%	50.3%

* Efficient frontier district with most similar constraints as this district.

Kansas School District Efficiency Study

District: **Burlington (D0244)**

Region: Southeast Kansas (Coffey County)

Why was this profile produced?

Governor Sebelius and the Ewing Marion Kauffman Foundation commissioned Standard & Poor's to study the relative efficiency of the state's school districts. A key component of the study is this two-page profile, produced for each of the state's less efficient school districts to provide them with a resource to help in their efforts to become more efficient.

What is a relative efficiency score? What does this district's score mean?

The relative efficiency score is derived by examining the relationship between three variables: **inputs** – how much the district spends per pupil; **outputs** – how well the district's students perform in reading and math; and **constraints** – how many of the district's students have special needs (i.e., economically disadvantaged backgrounds, physical or learning disabilities, or limited English proficiency), which are common factors that are outside of a district's control but can affect its spending and achievement levels.

Using linear mathematics, the district's data are then compared to all other school districts in the state to determine its relative efficiency score. Districts with the highest ratio of outputs to inputs in light of their constraints are considered to be on the efficiency frontier, and receive relative efficiency scores of 100%. Accordingly, they are referred to as **efficient frontier** districts. This district's score means that it is **84.02%** as efficient as the state's most efficient districts, taking into account its particular combination of inputs, outputs, and constraints.

This District's **Relative Efficiency Score** = 84.02%

How could this district improve its efficiency score? As noted above, this district has produced less than 100% of the outputs that might have been expected for its level of inputs and constraints, based on the performance of other districts. Had the district been able to increase its outputs to the target values shown in the accompanying table, while maintaining its current level of inputs, it would have reached the **efficient frontier**.

Output Improvement Targets

Outputs	Actual Value	Target Value*
Proficiency Rate	79.6%	94.7%
Performance Index	48.8%	58.3%

*Had this district achieved the target values, it would have received a 100% relative efficiency score.

Which data are included in the calculation of the district's efficiency score?

Inputs

Core Spending

 (\$ per student spent on co

(\$ per student spent on core day-to-day operations, adjusted for local differences in purchasing power)

<u>Constraints</u> (factors outside of the district's control)

- Enrollment of Economically Disadvantaged Students
- Enrollment of English Language Learners
- Enrollment of Students with Disabilities

- Reading and Math Proficiency Rate (percent of reading and math tests scoring at the "proficient" standard or higher)
- Reading and Math Performance Index (an index that goes beyond measuring proficiency by awarding points for all tests that score above the lowest level – "basic", "proficient", "advanced", and "exemplary" – with higher scores awarded more points than lower scores)

Kansas School District Efficiency Study

District: Burlington (D0244)

Region: Southeast Kansas (Coffey County)

Which Kansas districts are the most efficient?

A total of 21 districts across the state have been identified as **efficient frontier** districts (achieving relative efficiency scores of 100%); these are listed alphabetically in the following table. One (or more) of these districts may serve as the source of promising practices that might be replicated in order to improve this district's performance.

District	<u>County</u>	District	<u>County</u>	District	County
Arkansas City	Cowley	Dodge City	Ford	Lyons	Rice
Ashland	Clark	Gardner-Edgerton	Johnson	Newton	Harvey
Baldwin City	Douglas	Great Bend	Barton	Osawatomie	Miami
Brown County	Brown	Halstead	Harvey	Rolla	Morton
Burlingame	Osage	Kismet-Plains	Seward	Shawnee Mission	Johnson
Deerfield	Kearny	Lansing	Leavenworth	Waconda	Mitchell
DeSoto	Johnson	Leoti	Wichita	West Elk	Elk

How does this district compare to the state's most efficient districts?

The following table compares Burlington with two of the state's **efficient frontier** districts using two different criteria. The first comparison is made to the efficient frontier district with the most similar demographic constraints to this district. The second comparison is made to a similarly-sized efficient frontier district that spends no more than this district and produces the highest overall student performance.

Indiator	This	Most Similar Frontier District*	Best-Performing Frontier District**
Indicator District Name	District	District* Halstead	District**
	Burlington		Baldwin City
District Code	D0244	D0440	D0348
County	Coffey	Harvey	Douglas
Enrollment	893	735	1,407
Constraints			
Economically Disadvantaged Students	31.0%	34.7%	15.2%
English Language Learners	0.0%	0.0%	0.1%
Students with Disabilities	19.1%	18.7%	13.7%
Inputs			
Core Spending (per student)	\$8,547	\$6,792	\$6,490
Outputs			
Reading and Math Proficiency Rate	79.6%	83.9%	88.7%
Reading (grades 3-8)	87.0%	87.0%	94.3%
Reading (high school)	83.7%	83.8%	72.2%
Math (grades 3-8)	77.5%	86.3%	94.3%
Math (high school)	61.8%	64.0%	66.1%
Reading and Math Performance Index	48.8%	55.8%	64.0%
Reading (grades 3-8)	52.3%	56.7%	67.4%
Reading (high school)	50.8%	55.3%	44.6%
Math (grades 3-8)	47.7%	59.6%	74.1%
Math (high school)	39.4%	41.1%	40.1%

* Efficient frontier district with most similar constraints as this district.

Kansas School District Efficiency Study

District: Burrton (D0369)

Region: South Central Kansas (Harvey County)

Why was this profile produced?

Governor Sebelius and the Ewing Marion Kauffman Foundation commissioned Standard & Poor's to study the relative efficiency of the state's school districts. A key component of the study is this two-page profile, produced for each of the state's less efficient school districts to provide them with a resource to help in their efforts to become more efficient.

What is a relative efficiency score? What does this district's score mean?

The relative efficiency score is derived by examining the relationship between three variables: **inputs** – how much the district spends per pupil; **outputs** – how well the district's students perform in reading and math; and **constraints** – how many of the district's students have special needs (i.e., economically disadvantaged backgrounds, physical or learning disabilities, or limited English proficiency), which are common factors that are outside of a district's control but can affect its spending and achievement levels.

Using linear mathematics, the district's data are then compared to all other school districts in the state to determine its relative efficiency score. Districts with the highest ratio of outputs to inputs in light of their constraints are considered to be on the efficiency frontier, and receive relative efficiency scores of 100%. Accordingly, they are referred to as **efficient frontier** districts. This district's score means that it is **85.47%** as efficient as the state's most efficient districts, taking into account its particular combination of inputs, outputs, and constraints.

This District's **Relative Efficiency Score** = 85.47%

How could this district improve its efficiency score? As noted above, this district has produced less than 100% of the outputs that might have been expected for its level of inputs and constraints, based on the performance of other districts. Had the district been able to increase its outputs to the target values shown in the accompanying table, while maintaining its current level of inputs, it would have reached the **efficient frontier**.

Output Improvement Targets

Outputs	Actual Value	Target Value*
Proficiency Rate	73.0%	85.4%
Performance Index	41.5%	53.7%

*Had this district achieved the target values, it would have received a 100% relative efficiency score.

Which data are included in the calculation of the district's efficiency score?

Inputs

Core Spending
 (\$ per student spent on co

(\$ per student spent on core day-to-day operations, adjusted for local differences in purchasing power)

<u>Constraints</u> (factors outside of the district's control)

- Enrollment of Economically Disadvantaged Students
- Enrollment of English Language Learners
- Enrollment of Students with Disabilities

- **Reading and Math Proficiency Rate** (percent of reading and math tests scoring at the "proficient" standard or higher)
- Reading and Math Performance Index
 (an index that goes beyond measuring proficiency by awarding points for all tests that score above the lowest level – "basic",
 "proficient", "advanced", and "exemplary" – with higher scores awarded more points than lower scores)

Kansas School District Efficiency Study

District: Burrton (D0369)

Region: South Central Kansas (Harvey County)

Which Kansas districts are the most efficient?

A total of 21 districts across the state have been identified as **efficient frontier** districts (achieving relative efficiency scores of 100%); these are listed alphabetically in the following table. One (or more) of these districts may serve as the source of promising practices that might be replicated in order to improve this district's performance.

District	County	District	<u>County</u>	District	County
Arkansas City	Cowley	Dodge City	Ford	Lyons	Rice
Ashland	Clark	Gardner-Edgerton	Johnson	Newton	Harvey
Baldwin City	Douglas	Great Bend	Barton	Osawatomie	Miami
Brown County	Brown	Halstead	Harvey	Rolla	Morton
Burlingame	Osage	Kismet-Plains	Seward	Shawnee Mission	Johnson
Deerfield	Kearny	Lansing	Leavenworth	Waconda	Mitchell
DeSoto	Johnson	Leoti	Wichita	West Elk	Elk

How does this district compare to the state's most efficient districts?

The following table compares Burrton with two of the state's **efficient frontier** districts using two different criteria. The first comparison is made to the efficient frontier district with the most similar demographic constraints to this district. The second comparison is made to a similarly-sized efficient frontier district that spends no more than this district and produces the highest overall student performance.

	This	Most Similar Frontier	Best-Performing Frontier
Indicator	District	District*	District**
District Name	Burrton	Rolla	Leoti
District Code	D0369	D0217	D0467
County	Harvey	Morton	Wichita
Enrollment	287	212	501
Constraints			
Economically Disadvantaged Students	48.8%	53.5%	39.5%
English Language Learners	3.6%	15.2%	26.5%
Students with Disabilities	7.6%	10.7%	12.4%
Inputs			
Core Spending (per student)	\$8,199	\$11,780	\$8,455
Outputs			
Reading and Math Proficiency Rate	73.0%	78.6%	88.1%
Reading (grades 3-8)	82.0%	88.6%	84.4%
Reading (high school)	87.1%	74.2%	84.0%
Math (grades 3-8)	63.1%	77.2%	94.8%
Math (high school)	63.0%	44.1%	78.7%
Reading and Math Performance Index	41.5%	50.0%	58.9%
Reading (grades 3-8)	43.9%	55.7%	54.4%
Reading (high school)	57.2%	47.3%	62.3%
Math (grades 3-8)	37.9%	48.5%	63.1%
Math (high school)	31.0%	33.4%	57.5%

* Efficient frontier district with most similar constraints as this district.

Kansas School District Efficiency Study

District: Caldwell (D0360)

Region: South Central Kansas (Sumner County)

Why was this profile produced?

Governor Sebelius and the Ewing Marion Kauffman Foundation commissioned Standard & Poor's to study the relative efficiency of the state's school districts. A key component of the study is this two-page profile, produced for each of the state's less efficient school districts to provide them with a resource to help in their efforts to become more efficient.

What is a relative efficiency score? What does this district's score mean?

The relative efficiency score is derived by examining the relationship between three variables: **inputs** – how much the district spends per pupil; **outputs** – how well the district's students perform in reading and math; and **constraints** – how many of the district's students have special needs (i.e., economically disadvantaged backgrounds, physical or learning disabilities, or limited English proficiency), which are common factors that are outside of a district's control but can affect its spending and achievement levels.

Using linear mathematics, the district's data are then compared to all other school districts in the state to determine its relative efficiency score. Districts with the highest ratio of outputs to inputs in light of their constraints are considered to be on the efficiency frontier, and receive relative efficiency scores of 100%. Accordingly, they are referred to as **efficient frontier** districts. This district's score means that it is **90.82%** as efficient as the state's most efficient districts, taking into account its particular combination of inputs, outputs, and constraints.

This District's **Relative Efficiency Score** = 90.82%

How could this district improve its efficiency score? As noted above, this district has produced less than 100% of the outputs that might have been expected for its level of inputs and constraints, based on the performance of other districts. Had the district been able to increase its outputs to the target values shown in the accompanying table, while maintaining its current level of inputs, it would have reached the **efficient frontier**.

Output Improvement Targets

Outputs	Actual Value	Target Value*
Proficiency Rate	81.2%	89.4%
Performance Index	48.0%	57.0%

*Had this district achieved the target values, it would have received a 100% relative efficiency score.

Which data are included in the calculation of the district's efficiency score?

Inputs

Core Spending
 (\$ per student spent on co

(\$ per student spent on core day-to-day operations, adjusted for local differences in purchasing power)

Constraints (factors outside of the district's control)

- Enrollment of Economically Disadvantaged Students
- Enrollment of English Language Learners
- Enrollment of Students with Disabilities

- Reading and Math Proficiency Rate (percent of reading and math tests scoring at the "proficient" standard or higher)
- Reading and Math Performance Index (an index that goes beyond measuring proficiency by awarding points for all tests that score above the lowest level – "basic", "proficient", "advanced", and "exemplary" – with higher scores awarded more points than lower scores)

Kansas School District Efficiency Study

District: Caldwell (D0360)

Region: South Central Kansas (Sumner County)

Which Kansas districts are the most efficient?

A total of 21 districts across the state have been identified as **efficient frontier** districts (achieving relative efficiency scores of 100%); these are listed alphabetically in the following table. One (or more) of these districts may serve as the source of promising practices that might be replicated in order to improve this district's performance.

District	<u>County</u>	District	<u>County</u>	District	County
Arkansas City	Cowley	Dodge City	Ford	Lyons	Rice
Ashland	Clark	Gardner-Edgerton	Johnson	Newton	Harvey
Baldwin City	Douglas	Great Bend	Barton	Osawatomie	Miami
Brown County	Brown	Halstead	Harvey	Rolla	Morton
Burlingame	Osage	Kismet-Plains	Seward	Shawnee Mission	Johnson
Deerfield	Kearny	Lansing	Leavenworth	Waconda	Mitchell
DeSoto	Johnson	Leoti	Wichita	West Elk	Elk

How does this district compare to the state's most efficient districts?

The following table compares Caldwell with two of the state's **efficient frontier** districts using two different criteria. The first comparison is made to the efficient frontier district with the most similar demographic constraints to this district. The second comparison is made to a similarly-sized efficient frontier district that spends no more than this district and produces the highest overall student performance.

	This	Most Similar Frontier	Best-Performing Frontier
Indicator	District	District*	District**
District Name	Caldwell	Halstead	Leoti
District Code	D0360	D0440	D0467
County	Sumner	Harvey	Wichita
Enrollment	299	735	501
Constraints			
Economically Disadvantaged Students	46.4%	34.7%	39.5%
English Language Learners	0.0%	0.0%	26.5%
Students with Disabilities	16.9%	18.7%	12.4%
Inputs			
Core Spending (per student)	\$8,324	\$6,792	\$8,455
Outputs			
Reading and Math Proficiency Rate	81.2%	83.9%	88.1%
Reading (grades 3-8)	88.8%	87.0%	84.4%
Reading (high school)	79.6%	83.8%	84.0%
Math (grades 3-8)	84.0%	86.3%	94.8%
Math (high school)	62.2%	64.0%	78.7%
Reading and Math Performance Index	48.0%	55.8%	58.9%
Reading (grades 3-8)	54.6%	56.7%	54.4%
Reading (high school)	45.9%	55.3%	62.3%
Math (grades 3-8)	47.8%	59.6%	63.1%
Math (high school)	36.7%	41.1%	57.5%

* Efficient frontier district with most similar constraints as this district.

Kansas School District Efficiency Study

District: Caney (D0436)

Region: Southeast Kansas (Montgomery County)

Why was this profile produced?

Governor Sebelius and the Ewing Marion Kauffman Foundation commissioned Standard & Poor's to study the relative efficiency of the state's school districts. A key component of the study is this two-page profile, produced for each of the state's less efficient school districts to provide them with a resource to help in their efforts to become more efficient.

What is a relative efficiency score? What does this district's score mean?

The relative efficiency score is derived by examining the relationship between three variables: **inputs** – how much the district spends per pupil; **outputs** – how well the district's students perform in reading and math; and **constraints** – how many of the district's students have special needs (i.e., economically disadvantaged backgrounds, physical or learning disabilities, or limited English proficiency), which are common factors that are outside of a district's control but can affect its spending and achievement levels.

Using linear mathematics, the district's data are then compared to all other school districts in the state to determine its relative efficiency score. Districts with the highest ratio of outputs to inputs in light of their constraints are considered to be on the efficiency frontier, and receive relative efficiency scores of 100%. Accordingly, they are referred to as **efficient frontier** districts. This district's score means that it is **76.28%** as efficient as the state's most efficient districts, taking into account its particular combination of inputs, outputs, and constraints.

This District's **Relative Efficiency Score** = 76.28%

How could this district improve its efficiency score? As noted above, this district has produced less than 100% of the outputs that might have been expected for its level of inputs and constraints, based on the performance of other districts. Had the district been able to increase its outputs to the target values shown in the accompanying table, while maintaining its current level of inputs, it would have reached the **efficient frontier**.

Output Improvement Targets

Outputs	Actual Value	Target Value*
Proficiency Rate	71.5%	93.8%
Performance Index	42.8%	59.4%

*Had this district achieved the target values, it would have received a 100% relative efficiency score.

Which data are included in the calculation of the district's efficiency score?

Inputs

Core Spending
 (\$ per student spent on co

(\$ per student spent on core day-to-day operations, adjusted for local differences in purchasing power)

Constraints (factors outside of the district's control)

- Enrollment of Economically Disadvantaged Students
- Enrollment of English Language Learners
- Enrollment of Students with Disabilities

- **Reading and Math Proficiency Rate** (percent of reading and math tests scoring at the "proficient" standard or higher)
- Reading and Math Performance Index
 (an index that goes beyond measuring proficiency by awarding points for all tests that score above the lowest level – "basic",
 "proficient", "advanced", and "exemplary" – with higher scores awarded more points than lower scores)

Kansas School District Efficiency Study

District: Caney (D0436)

Region: Southeast Kansas (Montgomery County)

Which Kansas districts are the most efficient?

A total of 21 districts across the state have been identified as **efficient frontier** districts (achieving relative efficiency scores of 100%); these are listed alphabetically in the following table. One (or more) of these districts may serve as the source of promising practices that might be replicated in order to improve this district's performance.

District	County	District	<u>County</u>	District	County
Arkansas City	Cowley	Dodge City	Ford	Lyons	Rice
Ashland	Clark	Gardner-Edgerton	Johnson	Newton	Harvey
Baldwin City	Douglas	Great Bend	Barton	Osawatomie	Miami
Brown County	Brown	Halstead	Harvey	Rolla	Morton
Burlingame	Osage	Kismet-Plains	Seward	Shawnee Mission	Johnson
Deerfield	Kearny	Lansing	Leavenworth	Waconda	Mitchell
DeSoto	Johnson	Leoti	Wichita	West Elk	Elk

How does this district compare to the state's most efficient districts?

The following table compares Caney with two of the state's **efficient frontier** districts using two different criteria. The first comparison is made to the efficient frontier district with the most similar demographic constraints to this district. The second comparison is made to a similarly-sized efficient frontier district that spends no more than this district and produces the highest overall student performance.

Indicator	This District	Most Similar Frontier District*	Best-Performing Frontier District**
District Name	Caney	Osawatomie	Baldwin City
District Code	D0436	D0367	D0348
County	Montgomery	Miami	Douglas
Enrollment	855	1,235	1,407
Constraints			
Economically Disadvantaged Students	39.9%	50.8%	15.2%
English Language Learners	1.4%	0.0%	0.1%
Students with Disabilities	8.3%	15.3%	13.7%
Inputs			
Core Spending (per student)	\$7,875	\$6,193	\$6,490
Outputs			
Reading and Math Proficiency Rate	71.5%	75.5%	88.7%
Reading (grades 3-8)	70.4%	78.5%	94.3%
Reading (high school)	62.8%	78.4%	72.2%
Math (grades 3-8)	80.4%	81.4%	94.3%
Math (high school)	57.1%	39.7%	66.1%
Reading and Math Performance Index	42.8%	45.7%	64.0%
Reading (grades 3-8)	41.0%	48.0%	67.4%
Reading (high school)	39.0%	43.0%	44.6%
Math (grades 3-8)	50.1%	50.1%	74.1%
Math (high school)	31.3%	22.0%	40.1%

* Efficient frontier district with most similar constraints as this district.

Kansas School District Efficiency Study

District: Canton-Galva (D0419)

Why was this profile produced?

Governor Sebelius and the Ewing Marion Kauffman Foundation commissioned Standard & Poor's to study the relative efficiency of the state's school districts. A key component of the study is this two-page profile, produced for each of the state's less efficient school districts to provide them with a resource to help in their efforts to become more efficient.

What is a relative efficiency score? What does this district's score mean?

The relative efficiency score is derived by examining the relationship between three variables: **inputs** – how much the district spends per pupil; **outputs** – how well the district's students perform in reading and math; and **constraints** – how many of the district's students have special needs (i.e., economically disadvantaged backgrounds, physical or learning disabilities, or limited English proficiency), which are common factors that are outside of a district's control but can affect its spending and achievement levels.

Using linear mathematics, the district's data are then compared to all other school districts in the state to determine its relative efficiency score. Districts with the highest ratio of outputs to inputs in light of their constraints are considered to be on the efficiency frontier, and receive relative efficiency scores of 100%. Accordingly, they are referred to as **efficient frontier** districts. This district's score means that it is **82.31%** as efficient as the state's most efficient districts, taking into account its particular combination of inputs, outputs, and constraints.

This District's **Relative Efficiency Score** = 82.31%

How could this district improve its efficiency score? As noted above, this district has produced less than 100% of the outputs that might have been expected for its level of inputs and constraints, based on the performance of other districts. Had the district been able to increase its outputs to the target values shown in the accompanying table, while maintaining its current level of inputs, it would have reached the **efficient frontier**. This district's unattainable proficiency output target (greater than 100%) indicates that reaching the efficient frontier would also require reducing inputs; improving outputs alone would not be sufficient.

Output Improvement Targets

Outputs	Actual Value	Target Value*
Proficiency Rate	86.0%	>100%
Performance Index	56.2%	68.3%

*Had this district achieved the target values, it would have received a 100% relative efficiency score.

Note: A target value of ">100%" indicates that output improvements alone are not sufficient; input reductions are also necessary.

Which data are included in the calculation of the district's efficiency score?

Inputs

- **Outputs**
- Core Spending
 (\$ per student spent on core day-to-day operations, adjusted for local differences in purchasing power)

Constraints (factors outside of the district's control)

- Enrollment of Economically Disadvantaged Students
- Enrollment of English Language Learners
- Enrollment of Students with Disabilities

- **Reading and Math Proficiency Rate** (percent of reading and math tests scoring at the "proficient" standard or higher)
- Reading and Math Performance Index

 (an index that goes beyond measuring proficiency by awarding points for all tests that score above the lowest level "basic",
 "proficient", "advanced", and "exemplary" with higher scores awarded more points than lower scores)

Electronic copy available at: https://ssrn.com/abstract=2355427

Kansas School District Efficiency Study

District: Canton-Galva (D0419)

Region: North Central Kansas (McPherson County)

Which Kansas districts are the most efficient?

A total of 21 districts across the state have been identified as **efficient frontier** districts (achieving relative efficiency scores of 100%); these are listed alphabetically in the following table. One (or more) of these districts may serve as the source of promising practices that might be replicated in order to improve this district's performance.

District	<u>County</u>	District	<u>County</u>	District	County
Arkansas City	Cowley	Dodge City	Ford	Lyons	Rice
Ashland	Clark	Gardner-Edgerton	Johnson	Newton	Harvey
Baldwin City	Douglas	Great Bend	Barton	Osawatomie	Miami
Brown County	Brown	Halstead	Harvey	Rolla	Morton
Burlingame	Osage	Kismet-Plains	Seward	Shawnee Mission	Johnson
Deerfield	Kearny	Lansing	Leavenworth	Waconda	Mitchell
DeSoto	Johnson	Leoti	Wichita	West Elk	Elk

How does this district compare to the state's most efficient districts?

The following table compares Canton-Galva with two of the state's **efficient frontier** districts using two different criteria. The first comparison is made to the efficient frontier district with the most similar demographic constraints to this district. The second comparison is made to a similarly-sized efficient frontier district that spends no more than this district and produces the highest overall student performance.

	This	Most Similar Frontier	Best-Performing Frontier
Indicator	District	District*	District**
District Name	Canton-Galva	Halstead	Waconda
District Code	D0419	D0440	D0272
County	McPherson	Harvey	Mitchell
Enrollment	419	735	365
Constraints			
Economically Disadvantaged Students	29.2%	34.7%	44.3%
English Language Learners	0.0%	0.0%	0.0%
Students with Disabilities	16.0%	18.7%	12.9%
Inputs			
Core Spending (per student)	\$9,334	\$6,792	\$9,480
Outputs			
Reading and Math Proficiency Rate	86.0%	83.9%	94.5%
Reading (grades 3-8)	92.0%	87.0%	96.9%
Reading (high school)	89.5%	83.8%	88.6%
Math (grades 3-8)	90.6%	86.3%	96.6%
Math (high school)	59.9%	64.0%	92.0%
Reading and Math Performance Index	56.2%	55.8%	70.2%
Reading (grades 3-8)	60.7%	56.7%	70.4%
Reading (high school)	52.8%	55.3%	61.8%
Math (grades 3-8)	60.3%	59.6%	77.0%
Math (high school)	39.7%	41.1%	64.0%

* Efficient frontier district with most similar constraints as this district.

Kansas School District Efficiency Study

District: Central (D0462)

Region: South Central Kansas (Cowley County)

Why was this profile produced?

Governor Sebelius and the Ewing Marion Kauffman Foundation commissioned Standard & Poor's to study the relative efficiency of the state's school districts. A key component of the study is this two-page profile, produced for each of the state's less efficient school districts to provide them with a resource to help in their efforts to become more efficient.

What is a relative efficiency score? What does this district's score mean?

The relative efficiency score is derived by examining the relationship between three variables: **inputs** – how much the district spends per pupil; **outputs** – how well the district's students perform in reading and math; and **constraints** – how many of the district's students have special needs (i.e., economically disadvantaged backgrounds, physical or learning disabilities, or limited English proficiency), which are common factors that are outside of a district's control but can affect its spending and achievement levels.

Using linear mathematics, the district's data are then compared to all other school districts in the state to determine its relative efficiency score. Districts with the highest ratio of outputs to inputs in light of their constraints are considered to be on the efficiency frontier, and receive relative efficiency scores of 100%. Accordingly, they are referred to as **efficient frontier** districts. This district's score means that it is **65.65%** as efficient as the state's most efficient districts, taking into account its particular combination of inputs, outputs, and constraints.

This District's **Relative Efficiency Score** = 65.65%

How could this district improve its efficiency score? As noted above, this district has produced less than 100% of the outputs that might have been expected for its level of inputs and constraints, based on the performance of other districts. Had the district been able to increase its outputs to the target values shown in the accompanying table, while maintaining its current level of inputs, it would have reached the **efficient frontier**.

Output Improvement Targets

Outputs	Actual Value	Target Value*
Proficiency Rate	65.0%	99.1%
Performance Index	36.8%	63.8%

*Had this district achieved the target values, it would have received a 100% relative efficiency score.

Which data are included in the calculation of the district's efficiency score?

Inputs

Core Spending

 (\$ per student spent on core

(\$ per student spent on core day-to-day operations, adjusted for local differences in purchasing power)

<u>Constraints</u> (factors outside of the district's control)

- Enrollment of Economically Disadvantaged Students
- Enrollment of English Language Learners
- Enrollment of Students with Disabilities

- **Reading and Math Proficiency Rate** (percent of reading and math tests scoring at the "proficient" standard or higher)
- Reading and Math Performance Index
 (an index that goes beyond measuring proficiency by awarding points for all tests that score above the lowest level – "basic",
 "proficient", "advanced", and "exemplary" – with higher scores awarded more points than lower scores)

Kansas School District Efficiency Study

District: Central (D0462)

Region: South Central Kansas (Cowley County)

Which Kansas districts are the most efficient?

A total of 21 districts across the state have been identified as **efficient frontier** districts (achieving relative efficiency scores of 100%); these are listed alphabetically in the following table. One (or more) of these districts may serve as the source of promising practices that might be replicated in order to improve this district's performance.

District	County	District	County	District	County
Arkansas City	Cowley	Dodge City	Ford	Lyons	Rice
Ashland	Clark	Gardner-Edgerton	Johnson	Newton	Harvey
Baldwin City	Douglas	Great Bend	Barton	Osawatomie	Miami
Brown County	Brown	Halstead	Harvey	Rolla	Morton
Burlingame	Osage	Kismet-Plains	Seward	Shawnee Mission	Johnson
Deerfield	Kearny	Lansing	Leavenworth	Waconda	Mitchell
DeSoto	Johnson	Leoti	Wichita	West Elk	Elk

How does this district compare to the state's most efficient districts?

The following table compares Central with two of the state's **efficient frontier** districts using two different criteria. The first comparison is made to the efficient frontier district with the most similar demographic constraints to this district. The second comparison is made to a similarly-sized efficient frontier district that spends no more than this district and produces the highest overall student performance.

Indicator	This District	Most Similar Frontier District*	Best-Performing Frontier District**
District Name	Central	Waconda	Leoti
District Code	D0462	D0272	D0467
County	Cowley	Mitchell	Wichita
Enrollment	363	365	501
Constraints			
Economically Disadvantaged Students	38.6%	44.3%	39.5%
English Language Learners	0.0%	0.0%	26.5%
Students with Disabilities	14.1%	12.9%	12.4%
Inputs			
Core Spending (per student)	\$8,708	\$9,480	\$8,455
Outputs			
Reading and Math Proficiency Rate	65.0%	94.5%	88.1%
Reading (grades 3-8)	66.3%	96.9%	84.4%
Reading (high school)	74.0%	88.6%	84.0%
Math (grades 3-8)	62.1%	96.6%	94.8%
Math (high school)	68.2%	92.0%	78.7%
Reading and Math Performance Index	36.8%	70.2%	58.9%
Reading (grades 3-8)	36.7%	70.4%	54.4%
Reading (high school)	38.4%	61.8%	62.3%
Math (grades 3-8)	36.2%	77.0%	63.1%
Math (high school)	40.5%	64.0%	57.5%

* Efficient frontier district with most similar constraints as this district.

Kansas School District Efficiency Study

District: Central Heights (D0288)

Region: Southeast Kansas (Franklin County)

Why was this profile produced?

Governor Sebelius and the Ewing Marion Kauffman Foundation commissioned Standard & Poor's to study the relative efficiency of the state's school districts. A key component of the study is this two-page profile, produced for each of the state's less efficient school districts to provide them with a resource to help in their efforts to become more efficient.

What is a relative efficiency score? What does this district's score mean?

The relative efficiency score is derived by examining the relationship between three variables: **inputs** – how much the district spends per pupil; **outputs** – how well the district's students perform in reading and math; and **constraints** – how many of the district's students have special needs (i.e., economically disadvantaged backgrounds, physical or learning disabilities, or limited English proficiency), which are common factors that are outside of a district's control but can affect its spending and achievement levels.

Using linear mathematics, the district's data are then compared to all other school districts in the state to determine its relative efficiency score. Districts with the highest ratio of outputs to inputs in light of their constraints are considered to be on the efficiency frontier, and receive relative efficiency scores of 100%. Accordingly, they are referred to as **efficient frontier** districts. This district's score means that it is **90.65%** as efficient as the state's most efficient districts, taking into account its particular combination of inputs, outputs, and constraints.

This District's **Relative Efficiency Score** = 90.65%

How could this district improve its efficiency score? As noted above, this district has produced less than 100% of the outputs that might have been expected for its level of inputs and constraints, based on the performance of other districts. Had the district been able to increase its outputs to the target values shown in the accompanying table, while maintaining its current level of inputs, it would have reached the **efficient frontier**.

Output Improvement Targets

Outputs	Actual Value	Target Value*
Proficiency Rate	74.4%	82.0%
Performance Index	45.2%	55.7%

*Had this district achieved the target values, it would have received a 100% relative efficiency score.

Which data are included in the calculation of the district's efficiency score?

Inputs

Core Spending

 (\$ per student spent on cor

(\$ per student spent on core day-to-day operations, adjusted for local differences in purchasing power)

Constraints (factors outside of the district's control)

- Enrollment of Economically Disadvantaged Students
- Enrollment of English Language Learners
- Enrollment of Students with Disabilities

- Reading and Math Proficiency Rate (percent of reading and math tests scoring at the "proficient" standard or higher)
- Reading and Math Performance Index (an index that goes beyond measuring proficiency by awarding points for all tests that score above the lowest level – "basic", "proficient", "advanced", and "exemplary" – with higher scores awarded more points than lower scores)

Kansas School District Efficiency Study

District: Central Heights (D0288)

Region: Southeast Kansas (Franklin County)

Which Kansas districts are the most efficient?

A total of 21 districts across the state have been identified as **efficient frontier** districts (achieving relative efficiency scores of 100%); these are listed alphabetically in the following table. One (or more) of these districts may serve as the source of promising practices that might be replicated in order to improve this district's performance.

District	County	District	County	District	County
Arkansas City	Cowley	Dodge City	Ford	Lyons	Rice
Ashland	Clark	Gardner-Edgerton	Johnson	Newton	Harvey
Baldwin City	Douglas	Great Bend	Barton	Osawatomie	Miami
Brown County	Brown	Halstead	Harvey	Rolla	Morton
Burlingame	Osage	Kismet-Plains	Seward	Shawnee Mission	Johnson
Deerfield	Kearny	Lansing	Leavenworth	Waconda	Mitchell
DeSoto	Johnson	Leoti	Wichita	West Elk	Elk

How does this district compare to the state's most efficient districts?

The following table compares Central Heights with two of the state's **efficient frontier** districts using two different criteria. The first comparison is made to the efficient frontier district with the most similar demographic constraints to this district. The second comparison is made to a similarly-sized efficient frontier district that spends no more than this district and produces the highest overall student performance.

Indicator	This District	Most Similar Frontier District*	Best-Performing Frontier District**
District Name	Central Heights	Waconda	Osawatomie
District Code	D0288	D0272	D0367
County	Franklin	Mitchell	Miami
Enrollment	628	365	1,235
Constraints			
Economically Disadvantaged Students	34.3%	44.3%	50.8%
English Language Learners	0.0%	0.0%	0.0%
Students with Disabilities	8.2%	12.9%	15.3%
Inputs			
Core Spending (per student)	\$6,089	\$9,480	\$6,193
Outputs			
Reading and Math Proficiency Rate	74.4%	94.5%	75.5%
Reading (grades 3-8)	77.3%	96.9%	78.5%
Reading (high school)	68.0%	88.6%	78.4%
Math (grades 3-8)	79.7%	96.6%	81.4%
Math (high school)	55.4%	92.0%	39.7%
Reading and Math Performance Index	45.2%	70.2%	45.7%
Reading (grades 3-8)	46.8%	70.4%	48.0%
Reading (high school)	44.8%	61.8%	43.0%
Math (grades 3-8)	48.9%	77.0%	50.1%
Math (high school)	28.9%	64.0%	22.0%

* Efficient frontier district with most similar constraints as this district.

Kansas School District Efficiency Study

District: Centre (D0397)

Region: North Central Kansas (Marion County)

Why was this profile produced?

Governor Sebelius and the Ewing Marion Kauffman Foundation commissioned Standard & Poor's to study the relative efficiency of the state's school districts. A key component of the study is this two-page profile, produced for each of the state's less efficient school districts to provide them with a resource to help in their efforts to become more efficient.

What is a relative efficiency score? What does this district's score mean?

The relative efficiency score is derived by examining the relationship between three variables: **inputs** – how much the district spends per pupil; **outputs** – how well the district's students perform in reading and math; and **constraints** – how many of the district's students have special needs (i.e., economically disadvantaged backgrounds, physical or learning disabilities, or limited English proficiency), which are common factors that are outside of a district's control but can affect its spending and achievement levels.

Using linear mathematics, the district's data are then compared to all other school districts in the state to determine its relative efficiency score. Districts with the highest ratio of outputs to inputs in light of their constraints are considered to be on the efficiency frontier, and receive relative efficiency scores of 100%. Accordingly, they are referred to as **efficient frontier** districts. This district's score means that it is **82.60%** as efficient as the state's most efficient districts, taking into account its particular combination of inputs, outputs, and constraints.

This District's **Relative Efficiency Score** = 82.60%

How could this district improve its efficiency score? As noted above, this district has produced less than 100% of the outputs that might have been expected for its level of inputs and constraints, based on the performance of other districts. Had the district been able to increase its outputs to the target values shown in the accompanying table, while maintaining its current level of inputs, it would have reached the **efficient frontier**.

Output Improvement Targets

Outputs	Actual Value	Target Value*
Proficiency Rate	82.0%	99.3%
Performance Index	50.6%	64.5%

*Had this district achieved the target values, it would have received a 100% relative efficiency score.

Which data are included in the calculation of the district's efficiency score?

Inputs

Core Spending

 (\$ per student spent on cor

(\$ per student spent on core day-to-day operations, adjusted for local differences in purchasing power)

Constraints (factors outside of the district's control)

- Enrollment of Economically Disadvantaged Students
- Enrollment of English Language Learners
- Enrollment of Students with Disabilities

- Reading and Math Proficiency Rate (percent of reading and math tests scoring at the "proficient" standard or higher)
- Reading and Math Performance Index (an index that goes beyond measuring proficiency by awarding points for all tests that score above the lowest level – "basic", "proficient", "advanced", and "exemplary" – with higher scores awarded more points than lower scores)

Kansas School District Efficiency Study

District: Centre (D0397)

Region: North Central Kansas (Marion County)

Which Kansas districts are the most efficient?

A total of 21 districts across the state have been identified as **efficient frontier** districts (achieving relative efficiency scores of 100%); these are listed alphabetically in the following table. One (or more) of these districts may serve as the source of promising practices that might be replicated in order to improve this district's performance.

District	County	District	<u>County</u>	District	County
Arkansas City	Cowley	Dodge City	Ford	Lyons	Rice
Ashland	Clark	Gardner-Edgerton	Johnson	Newton	Harvey
Baldwin City	Douglas	Great Bend	Barton	Osawatomie	Miami
Brown County	Brown	Halstead	Harvey	Rolla	Morton
Burlingame	Osage	Kismet-Plains	Seward	Shawnee Mission	Johnson
Deerfield	Kearny	Lansing	Leavenworth	Waconda	Mitchell
DeSoto	Johnson	Leoti	Wichita	West Elk	Elk

How does this district compare to the state's most efficient districts?

The following table compares Centre with two of the state's **efficient frontier** districts using two different criteria. The first comparison is made to the efficient frontier district with the most similar demographic constraints to this district. The second comparison is made to a similarly-sized efficient frontier district that spends no more than this district and produces the highest overall student performance.

	This	Most Similar Frontier	Best-Performing Frontier
Indicator	District	District*	District**
District Name	Centre	Waconda	Leoti
District Code	D0397	D0272	D0467
County	Marion	Mitchell	Wichita
Enrollment	284	365	501
Constraints			
Economically Disadvantaged Students	38.1%	44.3%	39.5%
English Language Learners	0.0%	0.0%	26.5%
Students with Disabilities	14.6%	12.9%	12.4%
Inputs			
Core Spending (per student)	\$8,797	\$9,480	\$8,455
Outputs			
Reading and Math Proficiency Rate	82.0%	94.5%	88.1%
Reading (grades 3-8)	85.1%	96.9%	84.4%
Reading (high school)	83.1%	88.6%	84.0%
Math (grades 3-8)	83.1%	96.6%	94.8%
Math (high school)	69.2%	92.0%	78.7%
Reading and Math Performance Index	50.6%	70.2%	58.9%
Reading (grades 3-8)	51.9%	70.4%	54.4%
Reading (high school)	50.3%	61.8%	62.3%
Math (grades 3-8)	52.6%	77.0%	63.1%
Math (high school)	40.5%	64.0%	57.5%

* Efficient frontier district with most similar constraints as this district.

Kansas School District Efficiency Study

District: Chanute (D0413)

Region: Southeast Kansas (Neosho County)

Why was this profile produced?

Governor Sebelius and the Ewing Marion Kauffman Foundation commissioned Standard & Poor's to study the relative efficiency of the state's school districts. A key component of the study is this two-page profile, produced for each of the state's less efficient school districts to provide them with a resource to help in their efforts to become more efficient.

What is a relative efficiency score? What does this district's score mean?

The relative efficiency score is derived by examining the relationship between three variables: **inputs** – how much the district spends per pupil; **outputs** – how well the district's students perform in reading and math; and **constraints** – how many of the district's students have special needs (i.e., economically disadvantaged backgrounds, physical or learning disabilities, or limited English proficiency), which are common factors that are outside of a district's control but can affect its spending and achievement levels.

Using linear mathematics, the district's data are then compared to all other school districts in the state to determine its relative efficiency score. Districts with the highest ratio of outputs to inputs in light of their constraints are considered to be on the efficiency frontier, and receive relative efficiency scores of 100%. Accordingly, they are referred to as **efficient frontier** districts. This district's score means that it is **84.45%** as efficient as the state's most efficient districts, taking into account its particular combination of inputs, outputs, and constraints.

This District's **Relative Efficiency Score** = 84.45%

How could this district improve its efficiency score? As noted above, this district has produced less than 100% of the outputs that might have been expected for its level of inputs and constraints, based on the performance of other districts. Had the district been able to increase its outputs to the target values shown in the accompanying table, while maintaining its current level of inputs, it would have reached the **efficient frontier**.

Output Improvement Targets

Outputs	Actual Value	Target Value*
Proficiency Rate	72.3%	85.6%
Performance Index	44.2%	52.7%

*Had this district achieved the target values, it would have received a 100% relative efficiency score.

Which data are included in the calculation of the district's efficiency score?

Inputs

• Core Spending (\$ per student spent on core day-to-day operations,

adjusted for local differences in purchasing power)

Constraints (factors outside of the district's control)

- Enrollment of Economically Disadvantaged Students
- Enrollment of English Language Learners
- Enrollment of Students with Disabilities

- Reading and Math Proficiency Rate (percent of reading and math tests scoring at the "proficient" standard or higher)
- Reading and Math Performance Index (an index that goes beyond measuring proficiency by awarding points for all tests that score above the lowest level – "basic", "proficient", "advanced", and "exemplary" – with higher scores awarded more points than lower scores)

Kansas School District Efficiency Study

District: Chanute (D0413)

Region: Southeast Kansas (Neosho County)

Which Kansas districts are the most efficient?

A total of 21 districts across the state have been identified as **efficient frontier** districts (achieving relative efficiency scores of 100%); these are listed alphabetically in the following table. One (or more) of these districts may serve as the source of promising practices that might be replicated in order to improve this district's performance.

District	<u>County</u>	District	<u>County</u>	District	County
Arkansas City	Cowley	Dodge City	Ford	Lyons	Rice
Ashland	Clark	Gardner-Edgerton	Johnson	Newton	Harvey
Baldwin City	Douglas	Great Bend	Barton	Osawatomie	Miami
Brown County	Brown	Halstead	Harvey	Rolla	Morton
Burlingame	Osage	Kismet-Plains	Seward	Shawnee Mission	Johnson
Deerfield	Kearny	Lansing	Leavenworth	Waconda	Mitchell
DeSoto	Johnson	Leoti	Wichita	West Elk	Elk

How does this district compare to the state's most efficient districts?

The following table compares Chanute with two of the state's **efficient frontier** districts using two different criteria. The first comparison is made to the efficient frontier district with the most similar demographic constraints to this district. The second comparison is made to a similarly-sized efficient frontier district that spends no more than this district and produces the highest overall student performance.

Indicator	This District	Most Similar Frontier District*	Best-Performing Frontier District**
District Name	Chanute	Osawatomie	Gardner-Edgerton
District Code	D0413	D0367	D0231
County	Neosho	Miami	Johnson
Enrollment	1,884	1,235	3,782
Constraints			
Economically Disadvantaged Students	46.2%	50.8%	21.5%
English Language Learners	0.9%	0.0%	0.9%
Students with Disabilities	13.4%	15.3%	12.2%
Inputs			
Core Spending (per student)	\$7,448	\$6,193	\$5,565
Outputs			
Reading and Math Proficiency Rate	72.3%	75.5%	89.0%
Reading (grades 3-8)	77.6%	78.5%	88.9%
Reading (high school)	74.3%	78.4%	87.6%
Math (grades 3-8)	71.7%	81.4%	92.0%
Math (high school)	57.2%	39.7%	78.7%
Reading and Math Performance Index	44.2%	45.7%	61.5%
Reading (grades 3-8)	46.6%	48.0%	59.6%
Reading (high school)	49.5%	43.0%	63.8%
Math (grades 3-8)	43.2%	50.1%	65.9%
Math (high school)	36.2%	22.0%	50.3%

* Efficient frontier district with most similar constraints as this district.

Kansas School District Efficiency Study

District: Chapman (D0473)

Why was this profile produced?

Governor Sebelius and the Ewing Marion Kauffman Foundation commissioned Standard & Poor's to study the relative efficiency of the state's school districts. A key component of the study is this two-page profile, produced for each of the state's less efficient school districts to provide them with a resource to help in their efforts to become more efficient.

What is a relative efficiency score? What does this district's score mean?

The relative efficiency score is derived by examining the relationship between three variables: **inputs** – how much the district spends per pupil; **outputs** – how well the district's students perform in reading and math; and **constraints** – how many of the district's students have special needs (i.e., economically disadvantaged backgrounds, physical or learning disabilities, or limited English proficiency), which are common factors that are outside of a district's control but can affect its spending and achievement levels.

Using linear mathematics, the district's data are then compared to all other school districts in the state to determine its relative efficiency score. Districts with the highest ratio of outputs to inputs in light of their constraints are considered to be on the efficiency frontier, and receive relative efficiency scores of 100%. Accordingly, they are referred to as **efficient frontier** districts. This district's score means that it is **77.44%** as efficient as the state's most efficient districts, taking into account its particular combination of inputs, outputs, and constraints.

This District's **Relative Efficiency Score** = 77.44%

How could this district improve its efficiency score? As noted above, this district has produced less than 100% of the outputs that might have been expected for its level of inputs and constraints, based on the performance of other districts. Had the district been able to increase its outputs to the target values shown in the accompanying table, while maintaining its current level of inputs, it would have reached the **efficient frontier**.

Output Improvement Targets

Outputs	Actual Value	Target Value*
Proficiency Rate	75.4%	97.4%
Performance Index	46.6%	63.6%

*Had this district achieved the target values, it would have received a 100% relative efficiency score.

Which data are included in the calculation of the district's efficiency score?

Inputs

Core Spending

 (\$ per student spent on cor

(\$ per student spent on core day-to-day operations, adjusted for local differences in purchasing power)

<u>Constraints</u> (factors outside of the district's control)

- Enrollment of Economically Disadvantaged Students
- Enrollment of English Language Learners
- Enrollment of Students with Disabilities

- Reading and Math Proficiency Rate (percent of reading and math tests scoring at the "proficient" standard or higher)
- Reading and Math Performance Index (an index that goes beyond measuring proficiency by awarding points for all tests that score above the lowest level – "basic", "proficient", "advanced", and "exemplary" – with higher scores awarded more points than lower scores)

Kansas School District Efficiency Study

District: Chapman (D0473)

Region: North Central Kansas (Dickinson County)

Which Kansas districts are the most efficient?

A total of 21 districts across the state have been identified as **efficient frontier** districts (achieving relative efficiency scores of 100%); these are listed alphabetically in the following table. One (or more) of these districts may serve as the source of promising practices that might be replicated in order to improve this district's performance.

District	<u>County</u>	District	<u>County</u>	District	County
Arkansas City	Cowley	Dodge City	Ford	Lyons	Rice
Ashland	Clark	Gardner-Edgerton	Johnson	Newton	Harvey
Baldwin City	Douglas	Great Bend	Barton	Osawatomie	Miami
Brown County	Brown	Halstead	Harvey	Rolla	Morton
Burlingame	Osage	Kismet-Plains	Seward	Shawnee Mission	Johnson
Deerfield	Kearny	Lansing	Leavenworth	Waconda	Mitchell
DeSoto	Johnson	Leoti	Wichita	West Elk	Elk

How does this district compare to the state's most efficient districts?

The following table compares Chapman with two of the state's **efficient frontier** districts using two different criteria. The first comparison is made to the efficient frontier district with the most similar demographic constraints to this district. The second comparison is made to a similarly-sized efficient frontier district that spends no more than this district and produces the highest overall student performance.

	This	Most Similar Frontier	Best-Performing Frontier
Indicator	District	District*	District**
District Name	Chapman	Osawatomie	Baldwin City
District Code	D0473	D0367	D0348
County	Dickinson	Miami	Douglas
Enrollment	989	1,235	1,407
Constraints			
Economically Disadvantaged Students	32.9%	50.8%	15.2%
English Language Learners	0.0%	0.0%	0.1%
Students with Disabilities	14.0%	15.3%	13.7%
Inputs			
Core Spending (per student)	\$7,897	\$6,193	\$6,490
Outputs			
Reading and Math Proficiency Rate	75.4%	75.5%	88.7%
Reading (grades 3-8)	79.7%	78.5%	94.3%
Reading (high school)	82.3%	78.4%	72.2%
Math (grades 3-8)	72.0%	81.4%	94.3%
Math (high school)	68.7%	39.7%	66.1%
Reading and Math Performance Index	46.6%	45.7%	64.0%
Reading (grades 3-8)	50.5%	48.0%	67.4%
Reading (high school)	50.6%	43.0%	44.6%
Math (grades 3-8)	43.9%	50.1%	74.1%
Math (high school)	40.5%	22.0%	40.1%

* Efficient frontier district with most similar constraints as this district.

Kansas School District Efficiency Study

District: Chase County (D0284)

Region: North Central Kansas (Chase County)

Why was this profile produced?

Governor Sebelius and the Ewing Marion Kauffman Foundation commissioned Standard & Poor's to study the relative efficiency of the state's school districts. A key component of the study is this two-page profile, produced for each of the state's less efficient school districts to provide them with a resource to help in their efforts to become more efficient.

What is a relative efficiency score? What does this district's score mean?

The relative efficiency score is derived by examining the relationship between three variables: **inputs** – how much the district spends per pupil; **outputs** – how well the district's students perform in reading and math; and **constraints** – how many of the district's students have special needs (i.e., economically disadvantaged backgrounds, physical or learning disabilities, or limited English proficiency), which are common factors that are outside of a district's control but can affect its spending and achievement levels.

Using linear mathematics, the district's data are then compared to all other school districts in the state to determine its relative efficiency score. Districts with the highest ratio of outputs to inputs in light of their constraints are considered to be on the efficiency frontier, and receive relative efficiency scores of 100%. Accordingly, they are referred to as **efficient frontier** districts. This district's score means that it is **76.46%** as efficient as the state's most efficient districts, taking into account its particular combination of inputs, outputs, and constraints.

This District's **Relative Efficiency Score** = 76.46%

How could this district improve its efficiency score? As noted above, this district has produced less than 100% of the outputs that might have been expected for its level of inputs and constraints, based on the performance of other districts. Had the district been able to increase its outputs to the target values shown in the accompanying table, while maintaining its current level of inputs, it would have reached the **efficient frontier**.

Output Improvement Targets

Outputs	Actual Value	Target Value*
Proficiency Rate	73.6%	96.3%
Performance Index	45.4%	59.4%

*Had this district achieved the target values, it would have received a 100% relative efficiency score.

Which data are included in the calculation of the district's efficiency score?

Inputs

Core Spending
 (\$ per student spent on co

(\$ per student spent on core day-to-day operations, adjusted for local differences in purchasing power)

<u>Constraints</u> (factors outside of the district's control)

- Enrollment of Economically Disadvantaged Students
- Enrollment of English Language Learners
- Enrollment of Students with Disabilities

- Reading and Math Proficiency Rate (percent of reading and math tests scoring at the "proficient" standard or higher)
- Reading and Math Performance Index (an index that goes beyond measuring proficiency by awarding points for all tests that score above the lowest level – "basic", "proficient", "advanced", and "exemplary" – with higher scores awarded more points than lower scores)

Kansas School District Efficiency Study

District: Chase County (D0284)

Region: North Central Kansas (Chase County)

Which Kansas districts are the most efficient?

A total of 21 districts across the state have been identified as **efficient frontier** districts (achieving relative efficiency scores of 100%); these are listed alphabetically in the following table. One (or more) of these districts may serve as the source of promising practices that might be replicated in order to improve this district's performance.

District	County	District	<u>County</u>	District	County
Arkansas City	Cowley	Dodge City	Ford	Lyons	Rice
Ashland	Clark	Gardner-Edgerton	Johnson	Newton	Harvey
Baldwin City	Douglas	Great Bend	Barton	Osawatomie	Miami
Brown County	Brown	Halstead	Harvey	Rolla	Morton
Burlingame	Osage	Kismet-Plains	Seward	Shawnee Mission	Johnson
Deerfield	Kearny	Lansing	Leavenworth	Waconda	Mitchell
DeSoto	Johnson	Leoti	Wichita	West Elk	Elk

How does this district compare to the state's most efficient districts?

The following table compares Chase County with two of the state's **efficient frontier** districts using two different criteria. The first comparison is made to the efficient frontier district with the most similar demographic constraints to this district. The second comparison is made to a similarly-sized efficient frontier district that spends no more than this district and produces the highest overall student performance.

		Most Similar	Best-Performing
Indicator	This District	Frontier District*	Frontier District**
District Name	Chase County	Waconda	Baldwin City
District Code	D0284	D0272	D0348
County	Chase	Mitchell	Douglas
Enrollment	480	365	1,407
Constraints			
Economically Disadvantaged Students	41.2%	44.3%	15.2%
English Language Learners	0.0%	0.0%	0.1%
Students with Disabilities	12.9%	12.9%	13.7%
Inputs			
Core Spending (per student)	\$8,460	\$9,480	\$6,490
Outputs		•	
Reading and Math Proficiency Rate	73.6%	94.5%	88.7%
Reading (grades 3-8)	77.6%	96.9%	94.3%
Reading (high school)	73.8%	88.6%	72.2%
Math (grades 3-8)	77.6%	96.6%	94.3%
Math (high school)	63.7%	92.0%	66.1%
Reading and Math Performance Index	45.4%	70.2%	64.0%
Reading (grades 3-8)	49.0%	70.4%	67.4%
Reading (high school)	47.5%	61.8%	44.6%
Math (grades 3-8)	46.9%	77.0%	74.1%
Math (high school)	36.4%	64.0%	40.1%

* Efficient frontier district with most similar constraints as this district.

Kansas School District Efficiency Study

District: Chautauqua (D0286)

Region: Southeast Kansas (Chautauqua County)

Why was this profile produced?

Governor Sebelius and the Ewing Marion Kauffman Foundation commissioned Standard & Poor's to study the relative efficiency of the state's school districts. A key component of the study is this two-page profile, produced for each of the state's less efficient school districts to provide them with a resource to help in their efforts to become more efficient.

What is a relative efficiency score? What does this district's score mean?

The relative efficiency score is derived by examining the relationship between three variables: **inputs** – how much the district spends per pupil; **outputs** – how well the district's students perform in reading and math; and **constraints** – how many of the district's students have special needs (i.e., economically disadvantaged backgrounds, physical or learning disabilities, or limited English proficiency), which are common factors that are outside of a district's control but can affect its spending and achievement levels.

Using linear mathematics, the district's data are then compared to all other school districts in the state to determine its relative efficiency score. Districts with the highest ratio of outputs to inputs in light of their constraints are considered to be on the efficiency frontier, and receive relative efficiency scores of 100%. Accordingly, they are referred to as **efficient frontier** districts. This district's score means that it is **74.01%** as efficient as the state's most efficient districts, taking into account its particular combination of inputs, outputs, and constraints.

This District's **Relative Efficiency Score** = 74.01%

How could this district improve its efficiency score? As noted above, this district has produced less than 100% of the outputs that might have been expected for its level of inputs and constraints, based on the performance of other districts. Had the district been able to increase its outputs to the target values shown in the accompanying table, while maintaining its current level of inputs, it would have reached the **efficient frontier**.

Output Improvement Targets

Outputs	Actual Value	Target Value*
Proficiency Rate	65.8%	88.9%
Performance Index	36.2%	56.8%

*Had this district achieved the target values, it would have received a 100% relative efficiency score.

Which data are included in the calculation of the district's efficiency score?

Inputs

Core Spending
 (\$ per student spent on core day-to-day operations,

adjusted for local differences in purchasing power)

Constraints (factors outside of the district's control)

- Enrollment of Economically Disadvantaged Students
- Enrollment of English Language Learners
- Enrollment of Students with Disabilities

- Reading and Math Proficiency Rate (percent of reading and math tests scoring at the "proficient" standard or higher)
- Reading and Math Performance Index (an index that goes beyond measuring proficiency by awarding points for all tests that score above the lowest level – "basic", "proficient", "advanced", and "exemplary" – with higher scores awarded more points than lower scores)

Kansas School District Efficiency Study

District: Chautauqua (D0286)

Region: Southeast Kansas (Chautauqua County)

Which Kansas districts are the most efficient?

A total of 21 districts across the state have been identified as **efficient frontier** districts (achieving relative efficiency scores of 100%); these are listed alphabetically in the following table. One (or more) of these districts may serve as the source of promising practices that might be replicated in order to improve this district's performance.

District	County	District	<u>County</u>	District	County
Arkansas City	Cowley	Dodge City	Ford	Lyons	Rice
Ashland	Clark	Gardner-Edgerton	Johnson	Newton	Harvey
Baldwin City	Douglas	Great Bend	Barton	Osawatomie	Miami
Brown County	Brown	Halstead	Harvey	Rolla	Morton
Burlingame	Osage	Kismet-Plains	Seward	Shawnee Mission	Johnson
Deerfield	Kearny	Lansing	Leavenworth	Waconda	Mitchell
DeSoto	Johnson	Leoti	Wichita	West Elk	Elk

How does this district compare to the state's most efficient districts?

The following table compares Chautauqua with two of the state's **efficient frontier** districts using two different criteria. The first comparison is made to the efficient frontier district with the most similar demographic constraints to this district. The second comparison is made to a similarly-sized efficient frontier district that spends no more than this district and produces the highest overall student performance.

	This	Most Similar Frontier	Best-Performing Frontier
Indicator	District	District*	District**
District Name	Chautauqua	Osawatomie	Leoti
District Code	D0286	D0367	D0467
County	Chautauqua	Miami	Wichita
Enrollment	440	1,235	501
Constraints		•	
Economically Disadvantaged Students	47.8%	50.8%	39.5%
English Language Learners	0.0%	0.0%	26.5%
Students with Disabilities	15.9%	15.3%	12.4%
Inputs			
Core Spending (per student)	\$8,495	\$6,193	\$8,455
Outputs			
Reading and Math Proficiency Rate	65.8%	75.5%	88.1%
Reading (grades 3-8)	68.0%	78.5%	84.4%
Reading (high school)	61.0%	78.4%	84.0%
Math (grades 3-8)	73.2%	81.4%	94.8%
Math (high school)	45.4%	39.7%	78.7%
Reading and Math Performance Index	36.2%	45.7%	58.9%
Reading (grades 3-8)	38.1%	48.0%	54.4%
Reading (high school)	33.7%	43.0%	62.3%
Math (grades 3-8)	40.9%	50.1%	63.1%
Math (high school)	23.9%	22.0%	57.5%

* Efficient frontier district with most similar constraints as this district.

Kansas School District Efficiency Study

District: Cheney (D0268)

Region: South Central Kansas (Sedgwick County)

Why was this profile produced?

Governor Sebelius and the Ewing Marion Kauffman Foundation commissioned Standard & Poor's to study the relative efficiency of the state's school districts. A key component of the study is this two-page profile, produced for each of the state's less efficient school districts to provide them with a resource to help in their efforts to become more efficient.

What is a relative efficiency score? What does this district's score mean?

The relative efficiency score is derived by examining the relationship between three variables: **inputs** – how much the district spends per pupil; **outputs** – how well the district's students perform in reading and math; and **constraints** – how many of the district's students have special needs (i.e., economically disadvantaged backgrounds, physical or learning disabilities, or limited English proficiency), which are common factors that are outside of a district's control but can affect its spending and achievement levels.

Using linear mathematics, the district's data are then compared to all other school districts in the state to determine its relative efficiency score. Districts with the highest ratio of outputs to inputs in light of their constraints are considered to be on the efficiency frontier, and receive relative efficiency scores of 100%. Accordingly, they are referred to as **efficient frontier** districts. This district's score means that it is **85.16%** as efficient as the state's most efficient districts, taking into account its particular combination of inputs, outputs, and constraints.

This District's **Relative Efficiency Score** = **85.16%**

How could this district improve its efficiency score? As noted above, this district has produced less than 100% of the outputs that might have been expected for its level of inputs and constraints, based on the performance of other districts. Had the district been able to increase its outputs to the target values shown in the accompanying table, while maintaining its current level of inputs, it would have reached the **efficient frontier**. This district's unattainable proficiency output target (greater than 100%) indicates that reaching the efficient frontier would also require reducing inputs; improving outputs alone would not be sufficient.

Output Improvement Targets

Outputs	Actual Value	Target Value*
Proficiency Rate	87.4%	>100%
Performance Index	61.5%	72.3%

*Had this district achieved the target values, it would have received a 100% relative efficiency score.

Note: A target value of ">100%" indicates that output improvements alone are not sufficient; input reductions are also necessary.

Which data are included in the calculation of the district's efficiency score?

Inputs

- **Outputs**
- Core Spending
 (\$ per student spent on core day-to-day operations, adjusted for local differences in purchasing power)

Constraints (factors outside of the district's control)

- Enrollment of Economically Disadvantaged Students
- Enrollment of English Language Learners
- Enrollment of Students with Disabilities

- **Reading and Math Proficiency Rate** (percent of reading and math tests scoring at the "proficient" standard or higher)
- Reading and Math Performance Index

 (an index that goes beyond measuring proficiency by awarding points for all tests that score above the lowest level "basic",
 "proficient", "advanced", and "exemplary" with higher scores awarded more points than lower scores)

Electronic copy available at: https://ssrn.com/abstract=2355427

Kansas School District Efficiency Study

District: Cheney (D0268)

Region: South Central Kansas (Sedgwick County)

Which Kansas districts are the most efficient?

A total of 21 districts across the state have been identified as **efficient frontier** districts (achieving relative efficiency scores of 100%); these are listed alphabetically in the following table. One (or more) of these districts may serve as the source of promising practices that might be replicated in order to improve this district's performance.

District	<u>County</u>	District	<u>County</u>	District	County
Arkansas City	Cowley	Dodge City	Ford	Lyons	Rice
Ashland	Clark	Gardner-Edgerton	Johnson	Newton	Harvey
Baldwin City	Douglas	Great Bend	Barton	Osawatomie	Miami
Brown County	Brown	Halstead	Harvey	Rolla	Morton
Burlingame	Osage	Kismet-Plains	Seward	Shawnee Mission	Johnson
Deerfield	Kearny	Lansing	Leavenworth	Waconda	Mitchell
DeSoto	Johnson	Leoti	Wichita	West Elk	Elk

How does this district compare to the state's most efficient districts?

The following table compares Cheney with two of the state's **efficient frontier** districts using two different criteria. The first comparison is made to the efficient frontier district with the most similar demographic constraints to this district. The second comparison is made to a similarly-sized efficient frontier district that spends no more than this district and produces the highest overall student performance. In this case, the comparison district under both criteria is the same.

	This	Most Similar Frontier	Best-Performing Frontier
Indicator	District	District*	District**
District Name	Cheney	Baldwin City	Baldwin City
District Code	D0268	D0348	D0348
County	Sedgwick	Douglas	Douglas
Enrollment	802	1,407	1,407
Constraints			
Economically Disadvantaged Students	17.6%	15.2%	15.2%
English Language Learners	0.0%	0.1%	0.1%
Students with Disabilities	10.6%	13.7%	13.7%
Inputs			
Core Spending (per student)	\$6,799	\$6,490	\$6,490
Outputs			
Reading and Math Proficiency Rate	87.4%	88.7%	88.7%
Reading (grades 3-8)	91.2%	94.3%	94.3%
Reading (high school)	83.8%	72.2%	72.2%
Math (grades 3-8)	87.9%	94.3%	94.3%
Math (high school)	79.2%	66.1%	66.1%
Reading and Math Performance Index	61.5%	64.0%	64.0%
Reading (grades 3-8)	64.5%	67.4%	67.4%
Reading (high school)	52.9%	44.6%	44.6%
Math (grades 3-8)	63.2%	74.1%	74.1%
Math (high school)	56.1%	40.1%	40.1%

* Efficient frontier district with most similar constraints as this district.

Kansas School District Efficiency Study

District: Cherokee (D0247)

Region: Southeast Kansas (Crawford County)

Why was this profile produced?

Governor Sebelius and the Ewing Marion Kauffman Foundation commissioned Standard & Poor's to study the relative efficiency of the state's school districts. A key component of the study is this two-page profile, produced for each of the state's less efficient school districts to provide them with a resource to help in their efforts to become more efficient.

What is a relative efficiency score? What does this district's score mean?

The relative efficiency score is derived by examining the relationship between three variables: **inputs** – how much the district spends per pupil; **outputs** – how well the district's students perform in reading and math; and **constraints** – how many of the district's students have special needs (i.e., economically disadvantaged backgrounds, physical or learning disabilities, or limited English proficiency), which are common factors that are outside of a district's control but can affect its spending and achievement levels.

Using linear mathematics, the district's data are then compared to all other school districts in the state to determine its relative efficiency score. Districts with the highest ratio of outputs to inputs in light of their constraints are considered to be on the efficiency frontier, and receive relative efficiency scores of 100%. Accordingly, they are referred to as **efficient frontier** districts. This district's score means that it is **82.89%** as efficient as the state's most efficient districts, taking into account its particular combination of inputs, outputs, and constraints.

This District's **Relative Efficiency Score** = 82.89%

How could this district improve its efficiency score? As noted above, this district has produced less than 100% of the outputs that might have been expected for its level of inputs and constraints, based on the performance of other districts. Had the district been able to increase its outputs to the target values shown in the accompanying table, while maintaining its current level of inputs, it would have reached the **efficient frontier**.

Output Improvement Targets

Outputs	Actual Value	Target Value*
Proficiency Rate	76.0%	91.7%
Performance Index	48.3%	58.3%

*Had this district achieved the target values, it would have received a 100% relative efficiency score.

Which data are included in the calculation of the district's efficiency score?

Inputs

• Core Spending (\$ per student spent on core day-to-day operations,

adjusted for local differences in purchasing power)

Constraints (factors outside of the district's control)

- Enrollment of Economically Disadvantaged Students
- Enrollment of English Language Learners
- Enrollment of Students with Disabilities

- Reading and Math Proficiency Rate (percent of reading and math tests scoring at the "proficient" standard or higher)
- Reading and Math Performance Index (an index that goes beyond measuring proficiency by awarding points for all tests that score above the lowest level – "basic", "proficient", "advanced", and "exemplary" – with higher scores awarded more points than lower scores)

Kansas School District Efficiency Study

District: Cherokee (D0247)

Region: Southeast Kansas (Crawford County)

Which Kansas districts are the most efficient?

A total of 21 districts across the state have been identified as **efficient frontier** districts (achieving relative efficiency scores of 100%); these are listed alphabetically in the following table. One (or more) of these districts may serve as the source of promising practices that might be replicated in order to improve this district's performance.

District	County	District	<u>County</u>	District	County
Arkansas City	Cowley	Dodge City	Ford	Lyons	Rice
Ashland	Clark	Gardner-Edgerton	Johnson	Newton	Harvey
Baldwin City	Douglas	Great Bend	Barton	Osawatomie	Miami
Brown County	Brown	Halstead	Harvey	Rolla	Morton
Burlingame	Osage	Kismet-Plains	Seward	Shawnee Mission	Johnson
Deerfield	Kearny	Lansing	Leavenworth	Waconda	Mitchell
DeSoto	Johnson	Leoti	Wichita	West Elk	Elk

How does this district compare to the state's most efficient districts?

The following table compares Cherokee with two of the state's **efficient frontier** districts using two different criteria. The first comparison is made to the efficient frontier district with the most similar demographic constraints to this district. The second comparison is made to a similarly-sized efficient frontier district that spends no more than this district and produces the highest overall student performance.

	701. *	Most Similar	Best-Performing
Indicator	This District	Frontier District*	Frontier District**
District Name	Cherokee	Osawatomie	Baldwin City
District Code	D0247	D0367	D0348
County	Crawford	Miami	Douglas
Enrollment	816	1,235	1,407
Constraints			
Economically Disadvantaged Students	44.1%	50.8%	15.2%
English Language Learners	0.0%	0.0%	0.1%
Students with Disabilities	14.5%	15.3%	13.7%
Inputs			
Core Spending (per student)	\$8,311	\$6,193	\$6,490
Outputs			
Reading and Math Proficiency Rate	76.0%	75.5%	88.7%
Reading (grades 3-8)	82.7%	78.5%	94.3%
Reading (high school)	63.1%	78.4%	72.2%
Math (grades 3-8)	81.5%	81.4%	94.3%
Math (high school)	46.8%	39.7%	66.1%
Reading and Math Performance Index	48.3%	45.7%	64.0%
Reading (grades 3-8)	51.5%	48.0%	67.4%
Reading (high school)	32.6%	43.0%	44.6%
Math (grades 3-8)	55.5%	50.1%	74.1%
Math (high school)	24.8%	22.0%	40.1%

* Efficient frontier district with most similar constraints as this district.

Kansas School District Efficiency Study

District: Cherryvale (D0447)

Why was this profile produced?

Governor Sebelius and the Ewing Marion Kauffman Foundation commissioned Standard & Poor's to study the relative efficiency of the state's school districts. A key component of the study is this two-page profile, produced for each of the state's less efficient school districts to provide them with a resource to help in their efforts to become more efficient.

What is a relative efficiency score? What does this district's score mean?

The relative efficiency score is derived by examining the relationship between three variables: **inputs** – how much the district spends per pupil; **outputs** – how well the district's students perform in reading and math; and **constraints** – how many of the district's students have special needs (i.e., economically disadvantaged backgrounds, physical or learning disabilities, or limited English proficiency), which are common factors that are outside of a district's control but can affect its spending and achievement levels.

Using linear mathematics, the district's data are then compared to all other school districts in the state to determine its relative efficiency score. Districts with the highest ratio of outputs to inputs in light of their constraints are considered to be on the efficiency frontier, and receive relative efficiency scores of 100%. Accordingly, they are referred to as **efficient frontier** districts. This district's score means that it is **81.59%** as efficient as the state's most efficient districts, taking into account its particular combination of inputs, outputs, and constraints.

This District's **Relative Efficiency Score** = 81.59%

How could this district improve its efficiency score? As noted above, this district has produced less than 100% of the outputs that might have been expected for its level of inputs and constraints, based on the performance of other districts. Had the district been able to increase its outputs to the target values shown in the accompanying table, while maintaining its current level of inputs, it would have reached the **efficient frontier**.

Output Improvement Targets

Outputs	Actual Value	Target Value*
Proficiency Rate	72.5%	88.9%
Performance Index	45.8%	56.2%

*Had this district achieved the target values, it would have received a 100% relative efficiency score.

Which data are included in the calculation of the district's efficiency score?

Inputs

Core Spending
 (\$ per student spent on core

(\$ per student spent on core day-to-day operations, adjusted for local differences in purchasing power)

Constraints (factors outside of the district's control)

- Enrollment of Economically Disadvantaged Students
- Enrollment of English Language Learners
- Enrollment of Students with Disabilities

- Reading and Math Proficiency Rate (percent of reading and math tests scoring at the "proficient" standard or higher)
- Reading and Math Performance Index (an index that goes beyond measuring proficiency by awarding points for all tests that score above the lowest level – "basic", "proficient", "advanced", and "exemplary" – with higher scores awarded more points than lower scores)

Kansas School District Efficiency Study

District: Cherryvale (D0447)

Region: Southeast Kansas (Montgomery County)

Which Kansas districts are the most efficient?

A total of 21 districts across the state have been identified as **efficient frontier** districts (achieving relative efficiency scores of 100%); these are listed alphabetically in the following table. One (or more) of these districts may serve as the source of promising practices that might be replicated in order to improve this district's performance.

District	County	District	<u>County</u>	District	County
Arkansas City	Cowley	Dodge City	Ford	Lyons	Rice
Ashland	Clark	Gardner-Edgerton	Johnson	Newton	Harvey
Baldwin City	Douglas	Great Bend	Barton	Osawatomie	Miami
Brown County	Brown	Halstead	Harvey	Rolla	Morton
Burlingame	Osage	Kismet-Plains	Seward	Shawnee Mission	Johnson
Deerfield	Kearny	Lansing	Leavenworth	Waconda	Mitchell
DeSoto	Johnson	Leoti	Wichita	West Elk	Elk

How does this district compare to the state's most efficient districts?

The following table compares Cherryvale with two of the state's **efficient frontier** districts using two different criteria. The first comparison is made to the efficient frontier district with the most similar demographic constraints to this district. The second comparison is made to a similarly-sized efficient frontier district that spends no more than this district and produces the highest overall student performance.

		Most Similar	Best-Performing
Indicator	This District	Frontier District*	Frontier District**
District Name	Cherryvale	Waconda	Baldwin City
District Code	D0447	D0272	D0348
County	Montgomery	Mitchell	Douglas
Enrollment	681	365	1,407
Constraints			
Economically Disadvantaged Students	46.1%	44.3%	15.2%
English Language Learners	0.0%	0.0%	0.1%
Students with Disabilities	9.2%	12.9%	13.7%
Inputs			
Core Spending (per student)	\$8,116	\$9,480	\$6,490
Outputs			
Reading and Math Proficiency Rate	72.5%	94.5%	88.7%
Reading (grades 3-8)	80.5%	96.9%	94.3%
Reading (high school)	59.9%	88.6%	72.2%
Math (grades 3-8)	76.4%	96.6%	94.3%
Math (high school)	44.0%	92.0%	66.1%
Reading and Math Performance Index	45.8%	70.2%	64.0%
Reading (grades 3-8)	50.6%	70.4%	67.4%
Reading (high school)	34.2%	61.8%	44.6%
Math (grades 3-8)	51.4%	77.0%	74.1%
Math (high school)	24.5%	64.0%	40.1%

* Efficient frontier district with most similar constraints as this district.

Kansas School District Efficiency Study

District: Chetopa (D0505)

Region: Southeast Kansas (Labette County)

Why was this profile produced?

Governor Sebelius and the Ewing Marion Kauffman Foundation commissioned Standard & Poor's to study the relative efficiency of the state's school districts. A key component of the study is this two-page profile, produced for each of the state's less efficient school districts to provide them with a resource to help in their efforts to become more efficient.

What is a relative efficiency score? What does this district's score mean?

The relative efficiency score is derived by examining the relationship between three variables: **inputs** – how much the district spends per pupil; **outputs** – how well the district's students perform in reading and math; and **constraints** – how many of the district's students have special needs (i.e., economically disadvantaged backgrounds, physical or learning disabilities, or limited English proficiency), which are common factors that are outside of a district's control but can affect its spending and achievement levels.

Using linear mathematics, the district's data are then compared to all other school districts in the state to determine its relative efficiency score. Districts with the highest ratio of outputs to inputs in light of their constraints are considered to be on the efficiency frontier, and receive relative efficiency scores of 100%. Accordingly, they are referred to as **efficient frontier** districts. This district's score means that it is **96.37%** as efficient as the state's most efficient districts, taking into account its particular combination of inputs, outputs, and constraints.

This District's **Relative Efficiency Score** = 96.37%

How could this district improve its efficiency score? As noted above, this district has produced less than 100% of the outputs that might have been expected for its level of inputs and constraints, based on the performance of other districts. Had the district been able to increase its outputs to the target values shown in the accompanying table, while maintaining its current level of inputs, it would have reached the **efficient frontier**.

Output Improvement Targets

Outputs	Actual Value	Target Value*
Proficiency Rate	67.2%	69.7%
Performance Index	37.2%	43.2%

*Had this district achieved the target values, it would have received a 100% relative efficiency score.

Which data are included in the calculation of the district's efficiency score?

Inputs

Core Spending
 (\$ per student spent on cord

(\$ per student spent on core day-to-day operations, adjusted for local differences in purchasing power)

Constraints (factors outside of the district's control)

- Enrollment of Economically Disadvantaged Students
- Enrollment of English Language Learners
- Enrollment of Students with Disabilities

- **Reading and Math Proficiency Rate** (percent of reading and math tests scoring at the "proficient" standard or higher)
- Reading and Math Performance Index (an index that goes beyond measuring proficiency by awarding points for all tests that score above the lowest level – "basic", "proficient", "advanced", and "exemplary" – with higher scores awarded more points than lower scores)

Kansas School District Efficiency Study

District: Chetopa (D0505)

Region: Southeast Kansas (Labette County)

Which Kansas districts are the most efficient?

A total of 21 districts across the state have been identified as **efficient frontier** districts (achieving relative efficiency scores of 100%); these are listed alphabetically in the following table. One (or more) of these districts may serve as the source of promising practices that might be replicated in order to improve this district's performance.

District	County	District	<u>County</u>	District	County
Arkansas City	Cowley	Dodge City	Ford	Lyons	Rice
Ashland	Clark	Gardner-Edgerton	Johnson	Newton	Harvey
Baldwin City	Douglas	Great Bend	Barton	Osawatomie	Miami
Brown County	Brown	Halstead	Harvey	Rolla	Morton
Burlingame	Osage	Kismet-Plains	Seward	Shawnee Mission	Johnson
Deerfield	Kearny	Lansing	Leavenworth	Waconda	Mitchell
DeSoto	Johnson	Leoti	Wichita	West Elk	Elk

How does this district compare to the state's most efficient districts?

The following table compares Chetopa with two of the state's **efficient frontier** districts using two different criteria. The first comparison is made to the efficient frontier district with the most similar demographic constraints to this district. The second comparison is made to a similarly-sized efficient frontier district that spends no more than this district and produces the highest overall student performance. In this case, the comparison district under both criteria is the same.

	This	Most Similar Frontier	Best-Performing Frontier
Indicator	District	District*	District**
District Name	Chetopa	Waconda	Waconda
District Code	D0505	D0272	D0272
County	Labette	Mitchell	Mitchell
Enrollment	493	365	365
Constraints			
Economically Disadvantaged Students	66.9%	44.3%	44.3%
English Language Learners	0.0%	0.0%	0.0%
Students with Disabilities	11.3%	12.9%	12.9%
Inputs			
Core Spending (per student)	\$9,325	\$9,480	\$9,480
Outputs			
Reading and Math Proficiency Rate	67.2%	94.5%	94.5%
Reading (grades 3-8)	75.8%	96.9%	96.9%
Reading (high school)	75.4%	88.6%	88.6%
Math (grades 3-8)	64.7%	96.6%	96.6%
Math (high school)	40.3%	92.0%	92.0%
Reading and Math Performance Index	37.2%	70.2%	70.2%
Reading (grades 3-8)	43.3%	70.4%	70.4%
Reading (high school)	43.0%	61.8%	61.8%
Math (grades 3-8)	35.1%	77.0%	77.0%
Math (high school)	20.2%	64.0%	64.0%

* Efficient frontier district with most similar constraints as this district.

Kansas School District Efficiency Study

District: Cimarron-Ensign (D0102)

Region: Southwest Kansas (Gray County)

Why was this profile produced?

Governor Sebelius and the Ewing Marion Kauffman Foundation commissioned Standard & Poor's to study the relative efficiency of the state's school districts. A key component of the study is this two-page profile, produced for each of the state's less efficient school districts to provide them with a resource to help in their efforts to become more efficient.

What is a relative efficiency score? What does this district's score mean?

The relative efficiency score is derived by examining the relationship between three variables: **inputs** – how much the district spends per pupil; **outputs** – how well the district's students perform in reading and math; and **constraints** – how many of the district's students have special needs (i.e., economically disadvantaged backgrounds, physical or learning disabilities, or limited English proficiency), which are common factors that are outside of a district's control but can affect its spending and achievement levels.

Using linear mathematics, the district's data are then compared to all other school districts in the state to determine its relative efficiency score. Districts with the highest ratio of outputs to inputs in light of their constraints are considered to be on the efficiency frontier, and receive relative efficiency scores of 100%. Accordingly, they are referred to as **efficient frontier** districts. This district's score means that it is **98.89%** as efficient as the state's most efficient districts, taking into account its particular combination of inputs, outputs, and constraints.

This District's **Relative Efficiency Score = 98.89%**

How could this district improve its efficiency score? As noted above, this district has produced less than 100% of the outputs that might have been expected for its level of inputs and constraints, based on the performance of other districts. Had the district been able to increase its outputs to the target values shown in the accompanying table, while maintaining its current level of inputs, it would have reached the **efficient frontier**.

Output Improvement Targets

Outputs	Actual Value	Target Value*
Proficiency Rate	81.2%	82.1%
Performance Index	51.8%	55.0%

*Had this district achieved the target values, it would have received a 100% relative efficiency score.

Which data are included in the calculation of the district's efficiency score?

Inputs

Core Spending
 (\$ per student spent on a

(\$ per student spent on core day-to-day operations, adjusted for local differences in purchasing power)

Constraints (factors outside of the district's control)

- Enrollment of Economically Disadvantaged Students
- Enrollment of English Language Learners
- Enrollment of Students with Disabilities

- **Reading and Math Proficiency Rate** (percent of reading and math tests scoring at the "proficient" standard or higher)
- Reading and Math Performance Index (an index that goes beyond measuring proficiency by awarding points for all tests that score above the lowest level – "basic", "proficient", "advanced", and "exemplary" – with higher scores awarded more points than lower scores)

Kansas School District Efficiency Study

District: Cimarron-Ensign (D0102)

Region: Southwest Kansas (Gray County)

Which Kansas districts are the most efficient?

A total of 21 districts across the state have been identified as **efficient frontier** districts (achieving relative efficiency scores of 100%); these are listed alphabetically in the following table. One (or more) of these districts may serve as the source of promising practices that might be replicated in order to improve this district's performance.

District	County	District	<u>County</u>	District	County
Arkansas City	Cowley	Dodge City	Ford	Lyons	Rice
Ashland	Clark	Gardner-Edgerton	Johnson	Newton	Harvey
Baldwin City	Douglas	Great Bend	Barton	Osawatomie	Miami
Brown County	Brown	Halstead	Harvey	Rolla	Morton
Burlingame	Osage	Kismet-Plains	Seward	Shawnee Mission	Johnson
Deerfield	Kearny	Lansing	Leavenworth	Waconda	Mitchell
DeSoto	Johnson	Leoti	Wichita	West Elk	Elk

How does this district compare to the state's most efficient districts?

The following table compares Cimarron-Ensign with two of the state's **efficient frontier** districts using two different criteria. The first comparison is made to the efficient frontier district with the most similar demographic constraints to this district. The second comparison is made to a similarly-sized efficient frontier district that spends no more than this district and produces the highest overall student performance.

Indicator	This District	Most Similar Frontier District*	Best-Performing Frontier District**
District Name	Cimarron- Ensign	Kismet-Plains	Baldwin City
District Code	D0102	D0483	D0348
County	Gray	Seward	Douglas
Enrollment	697	731	1,407
Constraints			
Economically Disadvantaged Students	32.9%	62.0%	15.2%
English Language Learners	15.8%	36.3%	0.1%
Students with Disabilities	8.5%	11.5%	13.7%
Inputs			
Core Spending (per student)	\$7,550	\$7,745	\$6,490
Outputs		•	
Reading and Math Proficiency Rate	81.2%	63.3%	88.7%
Reading (grades 3-8)	82.2%	63.7%	94.3%
Reading (high school)	75.7%	64.2%	72.2%
Math (grades 3-8)	87.2%	65.2%	94.3%
Math (high school)	56.4%	53.7%	66.1%
Reading and Math Performance Index	51.8%	36.7%	64.0%
Reading (grades 3-8)	53.2%	34.1%	67.4%
Reading (high school)	43.6%	38.6%	44.6%
Math (grades 3-8)	57.1%	39.5%	74.1%
Math (high school) * Efficient frontier district with most similar cons	28.5%	34.2%	40.1%

* Efficient frontier district with most similar constraints as this district.

Kansas School District Efficiency Study

District: Circle (D0375)

Region: South Central Kansas (Butler County)

Why was this profile produced?

Governor Sebelius and the Ewing Marion Kauffman Foundation commissioned Standard & Poor's to study the relative efficiency of the state's school districts. A key component of the study is this two-page profile, produced for each of the state's less efficient school districts to provide them with a resource to help in their efforts to become more efficient.

What is a relative efficiency score? What does this district's score mean?

The relative efficiency score is derived by examining the relationship between three variables: **inputs** – how much the district spends per pupil; **outputs** – how well the district's students perform in reading and math; and **constraints** – how many of the district's students have special needs (i.e., economically disadvantaged backgrounds, physical or learning disabilities, or limited English proficiency), which are common factors that are outside of a district's control but can affect its spending and achievement levels.

Using linear mathematics, the district's data are then compared to all other school districts in the state to determine its relative efficiency score. Districts with the highest ratio of outputs to inputs in light of their constraints are considered to be on the efficiency frontier, and receive relative efficiency scores of 100%. Accordingly, they are referred to as **efficient frontier** districts. This district's score means that it is **92.39%** as efficient as the state's most efficient districts, taking into account its particular combination of inputs, outputs, and constraints.

This District's **Relative Efficiency Score** = 92.39%

How could this district improve its efficiency score? As noted above, this district has produced less than 100% of the outputs that might have been expected for its level of inputs and constraints, based on the performance of other districts. Had the district been able to increase its outputs to the target values shown in the accompanying table, while maintaining its current level of inputs, it would have reached the **efficient frontier**.

Output Improvement Targets

Outputs	Actual Value	Target Value*
Proficiency Rate	83.4%	90.3%
Performance Index	56.3%	61.8%

*Had this district achieved the target values, it would have received a 100% relative efficiency score.

Which data are included in the calculation of the district's efficiency score?

Inputs

Core Spending
 (\$ per student spent on cordinate spent)

(\$ per student spent on core day-to-day operations, adjusted for local differences in purchasing power)

<u>Constraints</u> (factors outside of the district's control)

- Enrollment of Economically Disadvantaged Students
- Enrollment of English Language Learners
- Enrollment of Students with Disabilities

- Reading and Math Proficiency Rate (percent of reading and math tests scoring at the "proficient" standard or higher)
- Reading and Math Performance Index (an index that goes beyond measuring proficiency by awarding points for all tests that score above the lowest level – "basic", "proficient", "advanced", and "exemplary" – with higher scores awarded more points than lower scores)

Kansas School District Efficiency Study

District: Circle (D0375)

Region: South Central Kansas (Butler County)

Which Kansas districts are the most efficient?

A total of 21 districts across the state have been identified as **efficient frontier** districts (achieving relative efficiency scores of 100%); these are listed alphabetically in the following table. One (or more) of these districts may serve as the source of promising practices that might be replicated in order to improve this district's performance.

District	County	District	<u>County</u>	District	County
Arkansas City	Cowley	Dodge City	Ford	Lyons	Rice
Ashland	Clark	Gardner-Edgerton	Johnson	Newton	Harvey
Baldwin City	Douglas	Great Bend	Barton	Osawatomie	Miami
Brown County	Brown	Halstead	Harvey	Rolla	Morton
Burlingame	Osage	Kismet-Plains	Seward	Shawnee Mission	Johnson
Deerfield	Kearny	Lansing	Leavenworth	Waconda	Mitchell
DeSoto	Johnson	Leoti	Wichita	West Elk	Elk

How does this district compare to the state's most efficient districts?

The following table compares Circle with two of the state's **efficient frontier** districts using two different criteria. The first comparison is made to the efficient frontier district with the most similar demographic constraints to this district. The second comparison is made to a similarly-sized efficient frontier district that spends no more than this district and produces the highest overall student performance. In this case, the comparison district under both criteria is the same.

Indicator	This District	Most Similar Frontier District*	Best-Performing Frontier District**
District Name	Circle	Gardner- Edgerton	Gardner-Edgerton
District Code	D0375	D0231	D0231
County	Butler	Johnson	Johnson
Enrollment	1,534	3,782	3,782
Constraints			
Economically Disadvantaged Students	25.6%	21.5%	21.5%
English Language Learners	0.0%	0.9%	0.9%
Students with Disabilities	11.6%	12.2%	12.2%
Inputs			
Core Spending (per student)	\$6,202	\$5,565	\$5,565
Outputs			
Reading and Math Proficiency Rate	83.4%	89.0%	89.0%
Reading (grades 3-8)	90.1%	88.9%	88.9%
Reading (high school)	76.5%	87.6%	87.6%
Math (grades 3-8)	86.7%	92.0%	92.0%
Math (high school)	55.6%	78.7%	78.7%
Reading and Math Performance Index	56.3%	61.5%	61.5%
Reading (grades 3-8)	60.5%	59.6%	59.6%
Reading (high school)	50.6%	63.8%	63.8%
Math (grades 3-8)	60.3%	65.9%	65.9%
Math (high school)	33.7%	50.3%	50.3%

* Efficient frontier district with most similar constraints as this district.

Kansas School District Efficiency Study

District: Claflin (D0354)

Region: South Central Kansas (Barton County)

Why was this profile produced?

Governor Sebelius and the Ewing Marion Kauffman Foundation commissioned Standard & Poor's to study the relative efficiency of the state's school districts. A key component of the study is this two-page profile, produced for each of the state's less efficient school districts to provide them with a resource to help in their efforts to become more efficient.

What is a relative efficiency score? What does this district's score mean?

The relative efficiency score is derived by examining the relationship between three variables: **inputs** – how much the district spends per pupil; **outputs** – how well the district's students perform in reading and math; and **constraints** – how many of the district's students have special needs (i.e., economically disadvantaged backgrounds, physical or learning disabilities, or limited English proficiency), which are common factors that are outside of a district's control but can affect its spending and achievement levels.

Using linear mathematics, the district's data are then compared to all other school districts in the state to determine its relative efficiency score. Districts with the highest ratio of outputs to inputs in light of their constraints are considered to be on the efficiency frontier, and receive relative efficiency scores of 100%. Accordingly, they are referred to as **efficient frontier** districts. This district's score means that it is **90.39%** as efficient as the state's most efficient districts, taking into account its particular combination of inputs, outputs, and constraints.

This District's **Relative Efficiency Score = 90.39%**

How could this district improve its efficiency score? As noted above, this district has produced less than 100% of the outputs that might have been expected for its level of inputs and constraints, based on the performance of other districts. Had the district been able to increase its outputs to the target values shown in the accompanying table, while maintaining its current level of inputs, it would have reached the **efficient frontier**. This district's unattainable proficiency output target (greater than 100%) indicates that reaching the efficient frontier would also require reducing inputs; improving outputs alone would not be sufficient.

Output Improvement Targets

Outputs	Actual Value	Target Value*
Proficiency Rate	87.2%	>100%
Performance Index	62.6%	69.2%

*Had this district achieved the target values, it would have received a 100% relative efficiency score.

Note: A target value of ">100%" indicates that output improvements alone are not sufficient; input reductions are also necessary.

Which data are included in the calculation of the district's efficiency score?

Inputs

- **Outputs**
- Core Spending
 (\$ per student spent on core day-to-day operations, adjusted for local differences in purchasing power)

Constraints (factors outside of the district's control)

- Enrollment of Economically Disadvantaged Students
- Enrollment of English Language Learners
- Enrollment of Students with Disabilities

- Reading and Math Proficiency Rate (percent of reading and math tests scoring at the "proficient" standard or higher)
- Reading and Math Performance Index

 (an index that goes beyond measuring proficiency by awarding points for all tests that score above the lowest level "basic",
 "proficient", "advanced", and "exemplary" with higher scores awarded more points than lower scores)

Electronic copy available at: https://ssrn.com/abstract=2355427

Kansas School District Efficiency Study

District: Claflin (D0354)

Region: South Central Kansas (Barton County)

Which Kansas districts are the most efficient?

A total of 21 districts across the state have been identified as **efficient frontier** districts (achieving relative efficiency scores of 100%); these are listed alphabetically in the following table. One (or more) of these districts may serve as the source of promising practices that might be replicated in order to improve this district's performance.

District	County	District	<u>County</u>	District	County
Arkansas City	Cowley	Dodge City	Ford	Lyons	Rice
Ashland	Clark	Gardner-Edgerton	Johnson	Newton	Harvey
Baldwin City	Douglas	Great Bend	Barton	Osawatomie	Miami
Brown County	Brown	Halstead	Harvey	Rolla	Morton
Burlingame	Osage	Kismet-Plains	Seward	Shawnee Mission	Johnson
Deerfield	Kearny	Lansing	Leavenworth	Waconda	Mitchell
DeSoto	Johnson	Leoti	Wichita	West Elk	Elk

How does this district compare to the state's most efficient districts?

The following table compares Claflin with two of the state's **efficient frontier** districts using two different criteria. The first comparison is made to the efficient frontier district with the most similar demographic constraints to this district. The second comparison is made to a similarly-sized efficient frontier district that spends no more than this district and produces the highest overall student performance.

	This	Most Similar Frontier	Best-Performing Frontier
Indicator	District	District*	District**
District Name	Claflin	Halstead	Waconda
District Code	D0354	D0440	D0272
County	Barton	Harvey	Mitchell
Enrollment	305	735	365
Constraints			
Economically Disadvantaged Students	31.0%	34.7%	44.3%
English Language Learners	0.1%	0.0%	0.0%
Students with Disabilities	16.5%	18.7%	12.9%
Inputs			
Core Spending (per student)	\$9,468	\$6,792	\$9,480
Outputs			
Reading and Math Proficiency Rate	87.2%	83.9%	94.5%
Reading (grades 3-8)	91.1%	87.0%	96.9%
Reading (high school)	77.7%	83.8%	88.6%
Math (grades 3-8)	91.2%	86.3%	96.6%
Math (high school)	72.6%	64.0%	92.0%
Reading and Math Performance Index	62.6%	55.8%	70.2%
Reading (grades 3-8)	65.2%	56.7%	70.4%
Reading (high school)	50.5%	55.3%	61.8%
Math (grades 3-8)	69.7%	59.6%	77.0%
Math (high school)	44.2%	41.1%	64.0%

* Efficient frontier district with most similar constraints as this district.

Kansas School District Efficiency Study

District: Clay Center (D0379)

Region: North Central Kansas (Clay County)

Why was this profile produced?

Governor Sebelius and the Ewing Marion Kauffman Foundation commissioned Standard & Poor's to study the relative efficiency of the state's school districts. A key component of the study is this two-page profile, produced for each of the state's less efficient school districts to provide them with a resource to help in their efforts to become more efficient.

What is a relative efficiency score? What does this district's score mean?

The relative efficiency score is derived by examining the relationship between three variables: **inputs** – how much the district spends per pupil; **outputs** – how well the district's students perform in reading and math; and **constraints** – how many of the district's students have special needs (i.e., economically disadvantaged backgrounds, physical or learning disabilities, or limited English proficiency), which are common factors that are outside of a district's control but can affect its spending and achievement levels.

Using linear mathematics, the district's data are then compared to all other school districts in the state to determine its relative efficiency score. Districts with the highest ratio of outputs to inputs in light of their constraints are considered to be on the efficiency frontier, and receive relative efficiency scores of 100%. Accordingly, they are referred to as **efficient frontier** districts. This district's score means that it is **90.32%** as efficient as the state's most efficient districts, taking into account its particular combination of inputs, outputs, and constraints.

This District's **Relative Efficiency Score** = 90.32%

How could this district improve its efficiency score? As noted above, this district has produced less than 100% of the outputs that might have been expected for its level of inputs and constraints, based on the performance of other districts. Had the district been able to increase its outputs to the target values shown in the accompanying table, while maintaining its current level of inputs, it would have reached the **efficient frontier**.

Output Improvement Targets

Outputs	Actual Value	Target Value*
Proficiency Rate	78.8%	88.4%
Performance Index	53.3%	59.0%

*Had this district achieved the target values, it would have received a 100% relative efficiency score.

Which data are included in the calculation of the district's efficiency score?

Inputs

Core Spending
 (\$ per student spent on cord)

(\$ per student spent on core day-to-day operations, adjusted for local differences in purchasing power)

<u>Constraints</u> (factors outside of the district's control)

- Enrollment of Economically Disadvantaged Students
- Enrollment of English Language Learners
- Enrollment of Students with Disabilities

- Reading and Math Proficiency Rate (percent of reading and math tests scoring at the "proficient" standard or higher)
- Reading and Math Performance Index (an index that goes beyond measuring proficiency by awarding points for all tests that score above the lowest level – "basic", "proficient", "advanced", and "exemplary" – with higher scores awarded more points than lower scores)

Kansas School District Efficiency Study

District: Clay Center (D0379)

Region: North Central Kansas (Clay County)

Which Kansas districts are the most efficient?

A total of 21 districts across the state have been identified as **efficient frontier** districts (achieving relative efficiency scores of 100%); these are listed alphabetically in the following table. One (or more) of these districts may serve as the source of promising practices that might be replicated in order to improve this district's performance.

District	County	District	<u>County</u>	District	County
Arkansas City	Cowley	Dodge City	Ford	Lyons	Rice
Ashland	Clark	Gardner-Edgerton	Johnson	Newton	Harvey
Baldwin City	Douglas	Great Bend	Barton	Osawatomie	Miami
Brown County	Brown	Halstead	Harvey	Rolla	Morton
Burlingame	Osage	Kismet-Plains	Seward	Shawnee Mission	Johnson
Deerfield	Kearny	Lansing	Leavenworth	Waconda	Mitchell
DeSoto	Johnson	Leoti	Wichita	West Elk	Elk

How does this district compare to the state's most efficient districts?

The following table compares Clay Center with two of the state's **efficient frontier** districts using two different criteria. The first comparison is made to the efficient frontier district with the most similar demographic constraints to this district. The second comparison is made to a similarly-sized efficient frontier district that spends no more than this district and produces the highest overall student performance.

	This	Most Similar Frontier	Best-Performing Frontier
Indicator	District	District*	District**
District Name	Clay Center	Osawatomie	Gardner-Edgerton
District Code	D0379	D0367	D0231
County	Clay	Miami	Johnson
Enrollment	1,396	1,235	3,782
Constraints			
Economically Disadvantaged Students	35.9%	50.8%	21.5%
English Language Learners	0.0%	0.0%	0.9%
Students with Disabilities	16.4%	15.3%	12.2%
Inputs			
Core Spending (per student)	\$7,272	\$6,193	\$5,565
Outputs			
Reading and Math Proficiency Rate	78.8%	75.5%	89.0%
Reading (grades 3-8)	83.6%	78.5%	88.9%
Reading (high school)	75.7%	78.4%	87.6%
Math (grades 3-8)	81.6%	81.4%	92.0%
Math (high school)	56.3%	39.7%	78.7%
Reading and Math Performance Index	53.3%	45.7%	61.5%
Reading (grades 3-8)	57.0%	48.0%	59.6%
Reading (high school)	49.3%	43.0%	63.8%
Math (grades 3-8)	56.5%	50.1%	65.9%
Math (high school)	35.0%	22.0%	50.3%

* Efficient frontier district with most similar constraints as this district.

Kansas School District Efficiency Study

District: Clearwater (D0264)

Region: South Central Kansas (Sedgwick County)

Why was this profile produced?

Governor Sebelius and the Ewing Marion Kauffman Foundation commissioned Standard & Poor's to study the relative efficiency of the state's school districts. A key component of the study is this two-page profile, produced for each of the state's less efficient school districts to provide them with a resource to help in their efforts to become more efficient.

What is a relative efficiency score? What does this district's score mean?

The relative efficiency score is derived by examining the relationship between three variables: **inputs** – how much the district spends per pupil; **outputs** – how well the district's students perform in reading and math; and **constraints** – how many of the district's students have special needs (i.e., economically disadvantaged backgrounds, physical or learning disabilities, or limited English proficiency), which are common factors that are outside of a district's control but can affect its spending and achievement levels.

Using linear mathematics, the district's data are then compared to all other school districts in the state to determine its relative efficiency score. Districts with the highest ratio of outputs to inputs in light of their constraints are considered to be on the efficiency frontier, and receive relative efficiency scores of 100%. Accordingly, they are referred to as **efficient frontier** districts. This district's score means that it is **74.18%** as efficient as the state's most efficient districts, taking into account its particular combination of inputs, outputs, and constraints.

This District's **Relative Efficiency Score** = 74.18%

How could this district improve its efficiency score? As noted above, this district has produced less than 100% of the outputs that might have been expected for its level of inputs and constraints, based on the performance of other districts. Had the district been able to increase its outputs to the target values shown in the accompanying table, while maintaining its current level of inputs, it would have reached the **efficient frontier**.

Output Improvement Targets

Outputs	Actual Value	Target Value*
Proficiency Rate	73.6%	99.3%
Performance Index	44.3%	68.5%

*Had this district achieved the target values, it would have received a 100% relative efficiency score.

Which data are included in the calculation of the district's efficiency score?

Inputs

Core Spending
 (\$ per student spent on c

(\$ per student spent on core day-to-day operations, adjusted for local differences in purchasing power)

<u>Constraints</u> (factors outside of the district's control)

- Enrollment of Economically Disadvantaged Students
- Enrollment of English Language Learners
- Enrollment of Students with Disabilities

- Reading and Math Proficiency Rate (percent of reading and math tests scoring at the "proficient" standard or higher)
- Reading and Math Performance Index (an index that goes beyond measuring proficiency by awarding points for all tests that score above the lowest level – "basic", "proficient", "advanced", and "exemplary" – with higher scores awarded more points than lower scores)

Kansas School District Efficiency Study

District: Clearwater (D0264)

Region: South Central Kansas (Sedgwick County)

Which Kansas districts are the most efficient?

A total of 21 districts across the state have been identified as **efficient frontier** districts (achieving relative efficiency scores of 100%); these are listed alphabetically in the following table. One (or more) of these districts may serve as the source of promising practices that might be replicated in order to improve this district's performance.

District	County	District	<u>County</u>	District	County
Arkansas City	Cowley	Dodge City	Ford	Lyons	Rice
Ashland	Clark	Gardner-Edgerton	Johnson	Newton	Harvey
Baldwin City	Douglas	Great Bend	Barton	Osawatomie	Miami
Brown County	Brown	Halstead	Harvey	Rolla	Morton
Burlingame	Osage	Kismet-Plains	Seward	Shawnee Mission	Johnson
Deerfield	Kearny	Lansing	Leavenworth	Waconda	Mitchell
DeSoto	Johnson	Leoti	Wichita	West Elk	Elk

How does this district compare to the state's most efficient districts?

The following table compares Clearwater with two of the state's **efficient frontier** districts using two different criteria. The first comparison is made to the efficient frontier district with the most similar demographic constraints to this district. The second comparison is made to a similarly-sized efficient frontier district that spends no more than this district and produces the highest overall student performance. In this case, the comparison district under both criteria is the same.

Indicator	This District	Most Similar Frontier District*	Best-Performing Frontier District**
District Name	Clearwater	Gardner- Edgerton	Gardner-Edgerton
District Code	D0264	D0231	D0231
County	Sedgwick	Johnson	Johnson
Enrollment	1,292	3,782	3,782
Constraints			
Economically Disadvantaged Students	18.6%	21.5%	21.5%
English Language Learners	0.0%	0.9%	0.9%
Students with Disabilities	11.1%	12.2%	12.2%
Inputs			
Core Spending (per student)	\$6,304	\$5,565	\$5,565
Outputs			
Reading and Math Proficiency Rate	73.6%	89.0%	89.0%
Reading (grades 3-8)	82.3%	88.9%	88.9%
Reading (high school)	67.1%	87.6%	87.6%
Math (grades 3-8)	74.6%	92.0%	92.0%
Math (high school)	50.4%	78.7%	78.7%
Reading and Math Performance Index	44.3%	61.5%	61.5%
Reading (grades 3-8)	49.7%	59.6%	59.6%
Reading (high school)	41.4%	63.8%	63.8%
Math (grades 3-8)	45.8%	65.9%	65.9%
Math (high school) * Efficient frontier district with most similar cons	26.6%	50.3%	50.3%

* Efficient frontier district with most similar constraints as this district.

Kansas School District Efficiency Study

District: Clifton-Clyde (D0224)

Why was this profile produced?

Governor Sebelius and the Ewing Marion Kauffman Foundation commissioned Standard & Poor's to study the relative efficiency of the state's school districts. A key component of the study is this two-page profile, produced for each of the state's less efficient school districts to provide them with a resource to help in their efforts to become more efficient.

What is a relative efficiency score? What does this district's score mean?

The relative efficiency score is derived by examining the relationship between three variables: **inputs** – how much the district spends per pupil; **outputs** – how well the district's students perform in reading and math; and **constraints** – how many of the district's students have special needs (i.e., economically disadvantaged backgrounds, physical or learning disabilities, or limited English proficiency), which are common factors that are outside of a district's control but can affect its spending and achievement levels.

Using linear mathematics, the district's data are then compared to all other school districts in the state to determine its relative efficiency score. Districts with the highest ratio of outputs to inputs in light of their constraints are considered to be on the efficiency frontier, and receive relative efficiency scores of 100%. Accordingly, they are referred to as **efficient frontier** districts. This district's score means that it is **85.00%** as efficient as the state's most efficient districts, taking into account its particular combination of inputs, outputs, and constraints.

This District's **Relative Efficiency Score** = **85.00%**

How could this district improve its efficiency score? As noted above, this district has produced less than 100% of the outputs that might have been expected for its level of inputs and constraints, based on the performance of other districts. Had the district been able to increase its outputs to the target values shown in the accompanying table, while maintaining its current level of inputs, it would have reached the **efficient frontier**. This district's unattainable proficiency output target (greater than 100%) indicates that reaching the efficient frontier would also require reducing inputs; improving outputs alone would not be sufficient.

Output Improvement Targets

Outputs	Actual Value	Target Value*
Proficiency Rate	85.5%	>100%
Performance Index	58.1%	68.3%

*Had this district achieved the target values, it would have received a 100% relative efficiency score.

Note: A target value of ">100%" indicates that output improvements alone are not sufficient; input reductions are also necessary.

Which data are included in the calculation of the district's efficiency score?

Inputs

- **Outputs**
- Core Spending
 (\$ per student spent on core day-to-day operations, adjusted for local differences in purchasing power)

Constraints (factors outside of the district's control)

- Enrollment of Economically Disadvantaged Students
- Enrollment of English Language Learners
- Enrollment of Students with Disabilities

- **Reading and Math Proficiency Rate** (percent of reading and math tests scoring at the "proficient" standard or higher)
- Reading and Math Performance Index

 (an index that goes beyond measuring proficiency by awarding points for all tests that score above the lowest level "basic",
 "proficient", "advanced", and "exemplary" with higher scores awarded more points than lower scores)

Electronic copy available at: https://ssrn.com/abstract=2355427

Kansas School District Efficiency Study

District: Clifton-Clyde (D0224)

Region: North Central Kansas (Washington County)

Which Kansas districts are the most efficient?

A total of 21 districts across the state have been identified as **efficient frontier** districts (achieving relative efficiency scores of 100%); these are listed alphabetically in the following table. One (or more) of these districts may serve as the source of promising practices that might be replicated in order to improve this district's performance.

District	<u>County</u>	District	<u>County</u>	District	County
Arkansas City	Cowley	Dodge City	Ford	Lyons	Rice
Ashland	Clark	Gardner-Edgerton	Johnson	Newton	Harvey
Baldwin City	Douglas	Great Bend	Barton	Osawatomie	Miami
Brown County	Brown	Halstead	Harvey	Rolla	Morton
Burlingame	Osage	Kismet-Plains	Seward	Shawnee Mission	Johnson
Deerfield	Kearny	Lansing	Leavenworth	Waconda	Mitchell
DeSoto	Johnson	Leoti	Wichita	West Elk	Elk

How does this district compare to the state's most efficient districts?

The following table compares Clifton-Clyde with two of the state's **efficient frontier** districts using two different criteria. The first comparison is made to the efficient frontier district with the most similar demographic constraints to this district. The second comparison is made to a similarly-sized efficient frontier district that spends no more than this district and produces the highest overall student performance.

	This	Most Similar Frontier	Best-Performing Frontier
Indicator	District	District*	District**
District Name	Clifton-Clyde	Waconda	Leoti
District Code	D0224	D0272	D0467
County	Washington	Mitchell	Wichita
Enrollment	326	365	501
Constraints			
Economically Disadvantaged Students	36.5%	44.3%	39.5%
English Language Learners	0.0%	0.0%	26.5%
Students with Disabilities	13.0%	12.9%	12.4%
Inputs			
Core Spending (per student)	\$8,663	\$9,480	\$8,455
Outputs			
Reading and Math Proficiency Rate	85.5%	94.5%	88.1%
Reading (grades 3-8)	87.6%	96.9%	84.4%
Reading (high school)	88.3%	88.6%	84.0%
Math (grades 3-8)	85.1%	96.6%	94.8%
Math (high school)	75.3%	92.0%	78.7%
Reading and Math Performance Index	58.1%	70.2%	58.9%
Reading (grades 3-8)	60.8%	70.4%	54.4%
Reading (high school)	57.6%	61.8%	62.3%
Math (grades 3-8)	56.8%	77.0%	63.1%
Math (high school)	46.7%	64.0%	57.5%

* Efficient frontier district with most similar constraints as this district.

Kansas School District Efficiency Study

District: Coffeyville (D0445)

Region: Southeast Kansas (Montgomery County)

Why was this profile produced?

Governor Sebelius and the Ewing Marion Kauffman Foundation commissioned Standard & Poor's to study the relative efficiency of the state's school districts. A key component of the study is this two-page profile, produced for each of the state's less efficient school districts to provide them with a resource to help in their efforts to become more efficient.

What is a relative efficiency score? What does this district's score mean?

The relative efficiency score is derived by examining the relationship between three variables: **inputs** – how much the district spends per pupil; **outputs** – how well the district's students perform in reading and math; and **constraints** – how many of the district's students have special needs (i.e., economically disadvantaged backgrounds, physical or learning disabilities, or limited English proficiency), which are common factors that are outside of a district's control but can affect its spending and achievement levels.

Using linear mathematics, the district's data are then compared to all other school districts in the state to determine its relative efficiency score. Districts with the highest ratio of outputs to inputs in light of their constraints are considered to be on the efficiency frontier, and receive relative efficiency scores of 100%. Accordingly, they are referred to as **efficient frontier** districts. This district's score means that it is **86.65%** as efficient as the state's most efficient districts, taking into account its particular combination of inputs, outputs, and constraints.

This District's **Relative Efficiency Score** = 86.65%

How could this district improve its efficiency score? As noted above, this district has produced less than 100% of the outputs that might have been expected for its level of inputs and constraints, based on the performance of other districts. Had the district been able to increase its outputs to the target values shown in the accompanying table, while maintaining its current level of inputs, it would have reached the **efficient frontier**.

Output Improvement Targets

Outputs	Actual Value	Target Value*
Proficiency Rate	64.2%	74.1%
Performance Index	37.2%	49.1%

*Had this district achieved the target values, it would have received a 100% relative efficiency score.

Which data are included in the calculation of the district's efficiency score?

Inputs

Core Spending
 (\$ per student spent on co

(\$ per student spent on core day-to-day operations, adjusted for local differences in purchasing power)

<u>Constraints</u> (factors outside of the district's control)

- Enrollment of Economically Disadvantaged Students
- Enrollment of English Language Learners
- Enrollment of Students with Disabilities

- **Reading and Math Proficiency Rate** (percent of reading and math tests scoring at the "proficient" standard or higher)
- Reading and Math Performance Index
 (an index that goes beyond measuring proficiency by awarding points for all tests that score above the lowest level – "basic",
 "proficient", "advanced", and "exemplary" – with higher scores awarded more points than lower scores)

Kansas School District Efficiency Study

District: Coffeyville (D0445)

Region: Southeast Kansas (Montgomery County)

Which Kansas districts are the most efficient?

A total of 21 districts across the state have been identified as **efficient frontier** districts (achieving relative efficiency scores of 100%); these are listed alphabetically in the following table. One (or more) of these districts may serve as the source of promising practices that might be replicated in order to improve this district's performance.

District	County	District	<u>County</u>	District	County
Arkansas City	Cowley	Dodge City	Ford	Lyons	Rice
Ashland	Clark	Gardner-Edgerton	Johnson	Newton	Harvey
Baldwin City	Douglas	Great Bend	Barton	Osawatomie	Miami
Brown County	Brown	Halstead	Harvey	Rolla	Morton
Burlingame	Osage	Kismet-Plains	Seward	Shawnee Mission	Johnson
Deerfield	Kearny	Lansing	Leavenworth	Waconda	Mitchell
DeSoto	Johnson	Leoti	Wichita	West Elk	Elk

How does this district compare to the state's most efficient districts?

The following table compares Coffeyville with two of the state's **efficient frontier** districts using two different criteria. The first comparison is made to the efficient frontier district with the most similar demographic constraints to this district. The second comparison is made to a similarly-sized efficient frontier district that spends no more than this district and produces the highest overall student performance.

	This	Most Similar Frontier	Best-Performing Frontier
Indicator	District	District*	District**
District Name	Coffeyville	Osawatomie	Gardner-Edgerton
District Code	D0445	D0367	D0231
County	Montgomery	Miami	Johnson
Enrollment	1,912	1,235	3,782
Constraints			
Economically Disadvantaged Students	61.8%	50.8%	21.5%
English Language Learners	0.6%	0.0%	0.9%
Students with Disabilities	13.8%	15.3%	12.2%
Inputs			
Core Spending (per student)	\$7,700	\$6,193	\$5,565
Outputs			
Reading and Math Proficiency Rate	64.2%	75.5%	89.0%
Reading (grades 3-8)	69.5%	78.5%	88.9%
Reading (high school)	69.9%	78.4%	87.6%
Math (grades 3-8)	65.0%	81.4%	92.0%
Math (high school)	38.5%	39.7%	78.7%
Reading and Math Performance Index	37.2%	45.7%	61.5%
Reading (grades 3-8)	40.1%	48.0%	59.6%
Reading (high school)	42.7%	43.0%	63.8%
Math (grades 3-8)	37.2%	50.1%	65.9%
Math (high school)	23.1%	22.0%	50.3%

* Efficient frontier district with most similar constraints as this district.

Kansas School District Efficiency Study

District: Colby (D0315)

Region: Northwest Kansas (Thomas County)

Why was this profile produced?

Governor Sebelius and the Ewing Marion Kauffman Foundation commissioned Standard & Poor's to study the relative efficiency of the state's school districts. A key component of the study is this two-page profile, produced for each of the state's less efficient school districts to provide them with a resource to help in their efforts to become more efficient.

What is a relative efficiency score? What does this district's score mean?

The relative efficiency score is derived by examining the relationship between three variables: **inputs** – how much the district spends per pupil; **outputs** – how well the district's students perform in reading and math; and **constraints** – how many of the district's students have special needs (i.e., economically disadvantaged backgrounds, physical or learning disabilities, or limited English proficiency), which are common factors that are outside of a district's control but can affect its spending and achievement levels.

Using linear mathematics, the district's data are then compared to all other school districts in the state to determine its relative efficiency score. Districts with the highest ratio of outputs to inputs in light of their constraints are considered to be on the efficiency frontier, and receive relative efficiency scores of 100%. Accordingly, they are referred to as **efficient frontier** districts. This district's score means that it is **78.07%** as efficient as the state's most efficient districts, taking into account its particular combination of inputs, outputs, and constraints.

This District's **Relative Efficiency Score** = 78.07%

How could this district improve its efficiency score? As noted above, this district has produced less than 100% of the outputs that might have been expected for its level of inputs and constraints, based on the performance of other districts. Had the district been able to increase its outputs to the target values shown in the accompanying table, while maintaining its current level of inputs, it would have reached the **efficient frontier**.

Output Improvement Targets

Outputs	Actual Value	Target Value*
Proficiency Rate	74.5%	95.4%
Performance Index	46.5%	61.9%

*Had this district achieved the target values, it would have received a 100% relative efficiency score.

Which data are included in the calculation of the district's efficiency score?

Inputs

• Core Spending (\$ per student spent on core day-to-day operations,

adjusted for local differences in purchasing power)

Constraints (factors outside of the district's control)

- Enrollment of Economically Disadvantaged Students
- Enrollment of English Language Learners
- Enrollment of Students with Disabilities

- **Reading and Math Proficiency Rate** (percent of reading and math tests scoring at the "proficient" standard or higher)
- Reading and Math Performance Index (an index that goes beyond measuring proficiency by awarding points for all tests that score above the lowest level – "basic", "proficient", "advanced", and "exemplary" – with higher scores awarded more points than lower scores)

Kansas School District Efficiency Study

District: Colby (D0315)

Region: Northwest Kansas (Thomas County)

Which Kansas districts are the most efficient?

A total of 21 districts across the state have been identified as **efficient frontier** districts (achieving relative efficiency scores of 100%); these are listed alphabetically in the following table. One (or more) of these districts may serve as the source of promising practices that might be replicated in order to improve this district's performance.

District	County	District	<u>County</u>	District	County
Arkansas City	Cowley	Dodge City	Ford	Lyons	Rice
Ashland	Clark	Gardner-Edgerton	Johnson	Newton	Harvey
Baldwin City	Douglas	Great Bend	Barton	Osawatomie	Miami
Brown County	Brown	Halstead	Harvey	Rolla	Morton
Burlingame	Osage	Kismet-Plains	Seward	Shawnee Mission	Johnson
Deerfield	Kearny	Lansing	Leavenworth	Waconda	Mitchell
DeSoto	Johnson	Leoti	Wichita	West Elk	Elk

How does this district compare to the state's most efficient districts?

The following table compares Colby with two of the state's **efficient frontier** districts using two different criteria. The first comparison is made to the efficient frontier district with the most similar demographic constraints to this district. The second comparison is made to a similarly-sized efficient frontier district that spends no more than this district and produces the highest overall student performance.

		Most Similar	Best-Performing
Indicator	This District	Frontier District*	Frontier District**
District Name	Colby	Halstead	Baldwin City
District Code	D0315	D0440	D0348
County	Thomas	Harvey	Douglas
Enrollment	1,045	735	1,407
Constraints			
Economically Disadvantaged Students	33.6%	34.7%	15.2%
English Language Learners	0.6%	0.0%	0.1%
Students with Disabilities	17.6%	18.7%	13.7%
Inputs			
Core Spending (per student)	\$8,382	\$6,792	\$6,490
Outputs			
Reading and Math Proficiency Rate	74.5%	83.9%	88.7%
Reading (grades 3-8)	81.8%	87.0%	94.3%
Reading (high school)	68.0%	83.8%	72.2%
Math (grades 3-8)	77.5%	86.3%	94.3%
Math (high school)	48.4%	64.0%	66.1%
Reading and Math Performance Index	46.5%	55.8%	64.0%
Reading (grades 3-8)	51.2%	56.7%	67.4%
Reading (high school)	41.9%	55.3%	44.6%
Math (grades 3-8)	48.4%	59.6%	74.1%
Math (high school)	30.4%	41.1%	40.1%

* Efficient frontier district with most similar constraints as this district.

Kansas School District Efficiency Study

District: Columbus (D0493)

Region: Southeast Kansas (Cherokee County)

Why was this profile produced?

Governor Sebelius and the Ewing Marion Kauffman Foundation commissioned Standard & Poor's to study the relative efficiency of the state's school districts. A key component of the study is this two-page profile, produced for each of the state's less efficient school districts to provide them with a resource to help in their efforts to become more efficient.

What is a relative efficiency score? What does this district's score mean?

The relative efficiency score is derived by examining the relationship between three variables: **inputs** – how much the district spends per pupil; **outputs** – how well the district's students perform in reading and math; and **constraints** – how many of the district's students have special needs (i.e., economically disadvantaged backgrounds, physical or learning disabilities, or limited English proficiency), which are common factors that are outside of a district's control but can affect its spending and achievement levels.

Using linear mathematics, the district's data are then compared to all other school districts in the state to determine its relative efficiency score. Districts with the highest ratio of outputs to inputs in light of their constraints are considered to be on the efficiency frontier, and receive relative efficiency scores of 100%. Accordingly, they are referred to as **efficient frontier** districts. This district's score means that it is **88.53%** as efficient as the state's most efficient districts, taking into account its particular combination of inputs, outputs, and constraints.

This District's **Relative Efficiency Score** = **88.53%**

How could this district improve its efficiency score? As noted above, this district has produced less than 100% of the outputs that might have been expected for its level of inputs and constraints, based on the performance of other districts. Had the district been able to increase its outputs to the target values shown in the accompanying table, while maintaining its current level of inputs, it would have reached the **efficient frontier**.

Output Improvement Targets

Outputs	Actual Value	Target Value*
Proficiency Rate	77.2%	87.2%
Performance Index	46.4%	55.4%

*Had this district achieved the target values, it would have received a 100% relative efficiency score.

Which data are included in the calculation of the district's efficiency score?

Inputs

Core Spending
 (\$ per student spent on core

(\$ per student spent on core day-to-day operations, adjusted for local differences in purchasing power)

Constraints (factors outside of the district's control)

- Enrollment of Economically Disadvantaged Students
- Enrollment of English Language Learners
- Enrollment of Students with Disabilities

- Reading and Math Proficiency Rate (percent of reading and math tests scoring at the "proficient" standard or higher)
- Reading and Math Performance Index (an index that goes beyond measuring proficiency by awarding points for all tests that score above the lowest level – "basic", "proficient", "advanced", and "exemplary" – with higher scores awarded more points than lower scores)

Kansas School District Efficiency Study

District: Columbus (D0493)

Region: Southeast Kansas (Cherokee County)

Which Kansas districts are the most efficient?

A total of 21 districts across the state have been identified as **efficient frontier** districts (achieving relative efficiency scores of 100%); these are listed alphabetically in the following table. One (or more) of these districts may serve as the source of promising practices that might be replicated in order to improve this district's performance.

District	<u>County</u>	District	<u>County</u>	District	County
Arkansas City	Cowley	Dodge City	Ford	Lyons	Rice
Ashland	Clark	Gardner-Edgerton	Johnson	Newton	Harvey
Baldwin City	Douglas	Great Bend	Barton	Osawatomie	Miami
Brown County	Brown	Halstead	Harvey	Rolla	Morton
Burlingame	Osage	Kismet-Plains	Seward	Shawnee Mission	Johnson
Deerfield	Kearny	Lansing	Leavenworth	Waconda	Mitchell
DeSoto	Johnson	Leoti	Wichita	West Elk	Elk

How does this district compare to the state's most efficient districts?

The following table compares Columbus with two of the state's **efficient frontier** districts using two different criteria. The first comparison is made to the efficient frontier district with the most similar demographic constraints to this district. The second comparison is made to a similarly-sized efficient frontier district that spends no more than this district and produces the highest overall student performance.

Indicator	This District	Most Similar Frontier District*	Best-Performing Frontier District**
District Name	Columbus	Osawatomie	Baldwin City
District Code	D0493	D0367	D0348
County	Cherokee	Miami	Douglas
Enrollment	1,243	1,235	1,407
Constraints			
Economically Disadvantaged Students	48.1%	50.8%	15.2%
English Language Learners	0.0%	0.0%	0.1%
Students with Disabilities	13.2%	15.3%	13.7%
Inputs			
Core Spending (per student)	\$8,220	\$6,193	\$6,490
Outputs			
Reading and Math Proficiency Rate	77.2%	75.5%	88.7%
Reading (grades 3-8)	83.8%	78.5%	94.3%
Reading (high school)	77.6%	78.4%	72.2%
Math (grades 3-8)	75.8%	81.4%	94.3%
Math (high school)	58.6%	39.7%	66.1%
Reading and Math Performance Index	46.4%	45.7%	64.0%
Reading (grades 3-8)	48.9%	48.0%	67.4%
Reading (high school)	44.8%	43.0%	44.6%
Math (grades 3-8)	47.8%	50.1%	74.1%
Math (high school)	33.1%	22.0%	40.1%

* Efficient frontier district with most similar constraints as this district.

Kansas School District Efficiency Study

District: Commanche (D0300)

Why was this profile produced?

Governor Sebelius and the Ewing Marion Kauffman Foundation commissioned Standard & Poor's to study the relative efficiency of the state's school districts. A key component of the study is this two-page profile, produced for each of the state's less efficient school districts to provide them with a resource to help in their efforts to become more efficient.

What is a relative efficiency score? What does this district's score mean?

The relative efficiency score is derived by examining the relationship between three variables: **inputs** – how much the district spends per pupil; **outputs** – how well the district's students perform in reading and math; and **constraints** – how many of the district's students have special needs (i.e., economically disadvantaged backgrounds, physical or learning disabilities, or limited English proficiency), which are common factors that are outside of a district's control but can affect its spending and achievement levels.

Using linear mathematics, the district's data are then compared to all other school districts in the state to determine its relative efficiency score. Districts with the highest ratio of outputs to inputs in light of their constraints are considered to be on the efficiency frontier, and receive relative efficiency scores of 100%. Accordingly, they are referred to as **efficient frontier** districts. This district's score means that it is **86.99%** as efficient as the state's most efficient districts, taking into account its particular combination of inputs, outputs, and constraints.

This District's **Relative Efficiency Score = 86.99%**

How could this district improve its efficiency score? As noted above, this district has produced less than 100% of the outputs that might have been expected for its level of inputs and constraints, based on the performance of other districts. Had the district been able to increase its outputs to the target values shown in the accompanying table, while maintaining its current level of inputs, it would have reached the **efficient frontier**.

Output Improvement Targets

Outputs	Actual Value	Target Value*
Proficiency Rate	72.7%	83.6%
Performance Index	43.4%	52.3%

*Had this district achieved the target values, it would have received a 100% relative efficiency score.

Which data are included in the calculation of the district's efficiency score?

Inputs

Core Spending
 (\$ per student spent on core day-to-day operations,

adjusted for local differences in purchasing power)

Constraints (factors outside of the district's control)

- Enrollment of Economically Disadvantaged Students
- Enrollment of English Language Learners
- Enrollment of Students with Disabilities

- Reading and Math Proficiency Rate (percent of reading and math tests scoring at the "proficient" standard or higher)
- Reading and Math Performance Index (an index that goes beyond measuring proficiency by awarding points for all tests that score above the lowest level – "basic", "proficient", "advanced", and "exemplary" – with higher scores awarded more points than lower scores)

Kansas School District Efficiency Study

District: Commanche (D0300)

Region: South Central Kansas (Comanche County)

Which Kansas districts are the most efficient?

A total of 21 districts across the state have been identified as **efficient frontier** districts (achieving relative efficiency scores of 100%); these are listed alphabetically in the following table. One (or more) of these districts may serve as the source of promising practices that might be replicated in order to improve this district's performance.

District	<u>County</u>	District	<u>County</u>	District	County
Arkansas City	Cowley	Dodge City	Ford	Lyons	Rice
Ashland	Clark	Gardner-Edgerton	Johnson	Newton	Harvey
Baldwin City	Douglas	Great Bend	Barton	Osawatomie	Miami
Brown County	Brown	Halstead	Harvey	Rolla	Morton
Burlingame	Osage	Kismet-Plains	Seward	Shawnee Mission	Johnson
Deerfield	Kearny	Lansing	Leavenworth	Waconda	Mitchell
DeSoto	Johnson	Leoti	Wichita	West Elk	Elk

How does this district compare to the state's most efficient districts?

The following table compares Commanche with two of the state's **efficient frontier** districts using two different criteria. The first comparison is made to the efficient frontier district with the most similar demographic constraints to this district. The second comparison is made to a similarly-sized efficient frontier district that spends no more than this district and produces the highest overall student performance.

	This	Most Similar Frontier	Best-Performing Frontier
Indicator	District	District*	District**
District Name	Commanche	Ashland	Waconda
District Code	D0300	D0220	D0272
County	Comanche	Clark	Mitchell
Enrollment	327	217	365
Constraints			
Economically Disadvantaged Students	36.6%	50.3%	44.3%
English Language Learners	2.4%	6.0%	0.0%
Students with Disabilities	20.7%	16.1%	12.9%
Inputs			
Core Spending (per student)	\$9,288	\$11,034	\$9,480
Outputs			
Reading and Math Proficiency Rate	72.7%	86.3%	94.5%
Reading (grades 3-8)	81.3%	82.5%	96.9%
Reading (high school)	56.1%	92.3%	88.6%
Math (grades 3-8)	72.0%	90.3%	96.6%
Math (high school)	73.3%	81.0%	92.0%
Reading and Math Performance Index	43.4%	64.2%	70.2%
Reading (grades 3-8)	47.2%	59.5%	70.4%
Reading (high school)	39.7%	65.1%	61.8%
Math (grades 3-8)	42.9%	71.7%	77.0%
Math (high school)	44.3%	51.3%	64.0%

* Efficient frontier district with most similar constraints as this district.

Kansas School District Efficiency Study

District: Concordia (D0333)

Region: North Central Kansas (Cloud County)

Why was this profile produced?

Governor Sebelius and the Ewing Marion Kauffman Foundation commissioned Standard & Poor's to study the relative efficiency of the state's school districts. A key component of the study is this two-page profile, produced for each of the state's less efficient school districts to provide them with a resource to help in their efforts to become more efficient.

What is a relative efficiency score? What does this district's score mean?

The relative efficiency score is derived by examining the relationship between three variables: **inputs** – how much the district spends per pupil; **outputs** – how well the district's students perform in reading and math; and **constraints** – how many of the district's students have special needs (i.e., economically disadvantaged backgrounds, physical or learning disabilities, or limited English proficiency), which are common factors that are outside of a district's control but can affect its spending and achievement levels.

Using linear mathematics, the district's data are then compared to all other school districts in the state to determine its relative efficiency score. Districts with the highest ratio of outputs to inputs in light of their constraints are considered to be on the efficiency frontier, and receive relative efficiency scores of 100%. Accordingly, they are referred to as **efficient frontier** districts. This district's score means that it is **90.83%** as efficient as the state's most efficient districts, taking into account its particular combination of inputs, outputs, and constraints.

This District's **Relative Efficiency Score = 90.83%**

How could this district improve its efficiency score? As noted above, this district has produced less than 100% of the outputs that might have been expected for its level of inputs and constraints, based on the performance of other districts. Had the district been able to increase its outputs to the target values shown in the accompanying table, while maintaining its current level of inputs, it would have reached the **efficient frontier**.

Output Improvement Targets

Outputs	Actual Value	Target Value*
Proficiency Rate	75.6%	83.2%
Performance Index	47.3%	53.8%

*Had this district achieved the target values, it would have received a 100% relative efficiency score.

Which data are included in the calculation of the district's efficiency score?

Inputs

Core Spending

 (\$ per student spent on co

(\$ per student spent on core day-to-day operations, adjusted for local differences in purchasing power)

<u>Constraints</u> (factors outside of the district's control)

- Enrollment of Economically Disadvantaged Students
- Enrollment of English Language Learners
- Enrollment of Students with Disabilities

- **Reading and Math Proficiency Rate** (percent of reading and math tests scoring at the "proficient" standard or higher)
- Reading and Math Performance Index

 (an index that goes beyond measuring proficiency by awarding points for all tests that score above the lowest level "basic",
 "proficient", "advanced", and "exemplary" with higher scores awarded more points than lower scores)

Kansas School District Efficiency Study

District: Concordia (D0333)

Region: North Central Kansas (Cloud County)

Which Kansas districts are the most efficient?

A total of 21 districts across the state have been identified as **efficient frontier** districts (achieving relative efficiency scores of 100%); these are listed alphabetically in the following table. One (or more) of these districts may serve as the source of promising practices that might be replicated in order to improve this district's performance.

District	<u>County</u>	District	<u>County</u>	District	County
Arkansas City	Cowley	Dodge City	Ford	Lyons	Rice
Ashland	Clark	Gardner-Edgerton	Johnson	Newton	Harvey
Baldwin City	Douglas	Great Bend	Barton	Osawatomie	Miami
Brown County	Brown	Halstead	Harvey	Rolla	Morton
Burlingame	Osage	Kismet-Plains	Seward	Shawnee Mission	Johnson
Deerfield	Kearny	Lansing	Leavenworth	Waconda	Mitchell
DeSoto	Johnson	Leoti	Wichita	West Elk	Elk

How does this district compare to the state's most efficient districts?

The following table compares Concordia with two of the state's **efficient frontier** districts using two different criteria. The first comparison is made to the efficient frontier district with the most similar demographic constraints to this district. The second comparison is made to a similarly-sized efficient frontier district that spends no more than this district and produces the highest overall student performance.

Indicator	This District	Most Similar Frontier District*	Best-Performing Frontier District**
District Name	Concordia	Halstead	Baldwin City
District Code	D0333	D0440	D0348
County	Cloud	Harvey	Douglas
Enrollment	1,115	735	1,407
Constraints	· · ·		
Economically Disadvantaged Students	47.6%	34.7%	15.2%
English Language Learners	0.2%	0.0%	0.1%
Students with Disabilities	19.9%	18.7%	13.7%
Inputs			
Core Spending (per student)	\$7,774	\$6,792	\$6,490
Outputs		•	
Reading and Math Proficiency Rate	75.6%	83.9%	88.7%
Reading (grades 3-8)	80.6%	87.0%	94.3%
Reading (high school)	70.7%	83.8%	72.2%
Math (grades 3-8)	77.1%	86.3%	94.3%
Math (high school)	63.1%	64.0%	66.1%
Reading and Math Performance Index	47.3%	55.8%	64.0%
Reading (grades 3-8)	50.6%	56.7%	67.4%
Reading (high school)	43.0%	55.3%	44.6%
Math (grades 3-8)	48.3%	59.6%	74.1%
Math (high school)	39.8%	41.1%	40.1%

* Efficient frontier district with most similar constraints as this district.

Kansas School District Efficiency Study

District: Conway Springs (D0356)

Region: South Central Kansas (Sumner County)

Why was this profile produced?

Governor Sebelius and the Ewing Marion Kauffman Foundation commissioned Standard & Poor's to study the relative efficiency of the state's school districts. A key component of the study is this two-page profile, produced for each of the state's less efficient school districts to provide them with a resource to help in their efforts to become more efficient.

What is a relative efficiency score? What does this district's score mean?

The relative efficiency score is derived by examining the relationship between three variables: **inputs** – how much the district spends per pupil; **outputs** – how well the district's students perform in reading and math; and **constraints** – how many of the district's students have special needs (i.e., economically disadvantaged backgrounds, physical or learning disabilities, or limited English proficiency), which are common factors that are outside of a district's control but can affect its spending and achievement levels.

Using linear mathematics, the district's data are then compared to all other school districts in the state to determine its relative efficiency score. Districts with the highest ratio of outputs to inputs in light of their constraints are considered to be on the efficiency frontier, and receive relative efficiency scores of 100%. Accordingly, they are referred to as **efficient frontier** districts. This district's score means that it is **90.86%** as efficient as the state's most efficient districts, taking into account its particular combination of inputs, outputs, and constraints.

This District's **Relative Efficiency Score = 90.86%**

How could this district improve its efficiency score? As noted above, this district has produced less than 100% of the outputs that might have been expected for its level of inputs and constraints, based on the performance of other districts. Had the district been able to increase its outputs to the target values shown in the accompanying table, while maintaining its current level of inputs, it would have reached the **efficient frontier**.

Output Improvement Targets

Outputs	Actual Value	Target Value*
Proficiency Rate	80.7%	88.9%
Performance Index	51.7%	61.2%

*Had this district achieved the target values, it would have received a 100% relative efficiency score.

Which data are included in the calculation of the district's efficiency score?

Inputs

Core Spending
 (\$ per student spent on core

(\$ per student spent on core day-to-day operations, adjusted for local differences in purchasing power)

Constraints (factors outside of the district's control)

- Enrollment of Economically Disadvantaged Students
- Enrollment of English Language Learners
- Enrollment of Students with Disabilities

- **Reading and Math Proficiency Rate** (percent of reading and math tests scoring at the "proficient" standard or higher)
- Reading and Math Performance Index
 (an index that goes beyond measuring proficiency by awarding points for all tests that score above the lowest level – "basic",
 "proficient", "advanced", and "exemplary" – with higher scores awarded more points than lower scores)

Kansas School District Efficiency Study

District: Conway Springs (D0356)

Region: South Central Kansas (Sumner County)

Which Kansas districts are the most efficient?

A total of 21 districts across the state have been identified as **efficient frontier** districts (achieving relative efficiency scores of 100%); these are listed alphabetically in the following table. One (or more) of these districts may serve as the source of promising practices that might be replicated in order to improve this district's performance.

District	<u>County</u>	District	<u>County</u>	District	County
Arkansas City	Cowley	Dodge City	Ford	Lyons	Rice
Ashland	Clark	Gardner-Edgerton	Johnson	Newton	Harvey
Baldwin City	Douglas	Great Bend	Barton	Osawatomie	Miami
Brown County	Brown	Halstead	Harvey	Rolla	Morton
Burlingame	Osage	Kismet-Plains	Seward	Shawnee Mission	Johnson
Deerfield	Kearny	Lansing	Leavenworth	Waconda	Mitchell
DeSoto	Johnson	Leoti	Wichita	West Elk	Elk

How does this district compare to the state's most efficient districts?

The following table compares Conway Springs with two of the state's **efficient frontier** districts using two different criteria. The first comparison is made to the efficient frontier district with the most similar demographic constraints to this district. The second comparison is made to a similarly-sized efficient frontier district that spends no more than this district and produces the highest overall student performance.

	This	Most Similar Frontier	Best-Performing Frontier
Indicator	District	District*	District**
District Name	Conway Springs	Waconda	Baldwin City
District Code	D0356	D0272	D0348
County	Sumner	Mitchell	Douglas
Enrollment	694	365	1,407
Constraints			
Economically Disadvantaged Students	22.9%	44.3%	15.2%
English Language Learners	0.0%	0.0%	0.1%
Students with Disabilities	9.5%	12.9%	13.7%
Inputs			
Core Spending (per student)	\$5,749	\$9,480	\$6,490
Outputs			
Reading and Math Proficiency Rate	80.7%	94.5%	88.7%
Reading (grades 3-8)	85.3%	96.9%	94.3%
Reading (high school)	74.3%	88.6%	72.2%
Math (grades 3-8)	87.0%	96.6%	94.3%
Math (high school)	58.9%	92.0%	66.1%
Reading and Math Performance Index	51.7%	70.2%	64.0%
Reading (grades 3-8)	52.6%	70.4%	67.4%
Reading (high school)	44.6%	61.8%	44.6%
Math (grades 3-8)	57.0%	77.0%	74.1%
Math (high school)	41.3%	64.0%	40.1%

* Efficient frontier district with most similar constraints as this district.

Kansas School District Efficiency Study

District: Crest (D0479)

Region: Southeast Kansas (Anderson County)

Why was this profile produced?

Governor Sebelius and the Ewing Marion Kauffman Foundation commissioned Standard & Poor's to study the relative efficiency of the state's school districts. A key component of the study is this two-page profile, produced for each of the state's less efficient school districts to provide them with a resource to help in their efforts to become more efficient.

What is a relative efficiency score? What does this district's score mean?

The relative efficiency score is derived by examining the relationship between three variables: **inputs** – how much the district spends per pupil; **outputs** – how well the district's students perform in reading and math; and **constraints** – how many of the district's students have special needs (i.e., economically disadvantaged backgrounds, physical or learning disabilities, or limited English proficiency), which are common factors that are outside of a district's control but can affect its spending and achievement levels.

Using linear mathematics, the district's data are then compared to all other school districts in the state to determine its relative efficiency score. Districts with the highest ratio of outputs to inputs in light of their constraints are considered to be on the efficiency frontier, and receive relative efficiency scores of 100%. Accordingly, they are referred to as **efficient frontier** districts. This district's score means that it is **77.42%** as efficient as the state's most efficient districts, taking into account its particular combination of inputs, outputs, and constraints.

This District's **Relative Efficiency Score** = 77.42%

How could this district improve its efficiency score? As noted above, this district has produced less than 100% of the outputs that might have been expected for its level of inputs and constraints, based on the performance of other districts. Had the district been able to increase its outputs to the target values shown in the accompanying table, while maintaining its current level of inputs, it would have reached the **efficient frontier**.

Output Improvement Targets

Outputs	Actual Value	Target Value*
Proficiency Rate	71.2%	92.0%
Performance Index	41.4%	60.1%

*Had this district achieved the target values, it would have received a 100% relative efficiency score.

Which data are included in the calculation of the district's efficiency score?

Inputs

Core Spending

 (\$ per student spent on co

(\$ per student spent on core day-to-day operations, adjusted for local differences in purchasing power)

<u>Constraints</u> (factors outside of the district's control)

- Enrollment of Economically Disadvantaged Students
- Enrollment of English Language Learners
- Enrollment of Students with Disabilities

- Reading and Math Proficiency Rate (percent of reading and math tests scoring at the "proficient" standard or higher)
- Reading and Math Performance Index (an index that goes beyond measuring proficiency by awarding points for all tests that score above the lowest level – "basic", "proficient", "advanced", and "exemplary" – with higher scores awarded more points than lower scores)

Kansas School District Efficiency Study

District: Crest (D0479)

Region: Southeast Kansas (Anderson County)

Which Kansas districts are the most efficient?

A total of 21 districts across the state have been identified as **efficient frontier** districts (achieving relative efficiency scores of 100%); these are listed alphabetically in the following table. One (or more) of these districts may serve as the source of promising practices that might be replicated in order to improve this district's performance.

District	County	District	<u>County</u>	District	County
Arkansas City	Cowley	Dodge City	Ford	Lyons	Rice
Ashland	Clark	Gardner-Edgerton	Johnson	Newton	Harvey
Baldwin City	Douglas	Great Bend	Barton	Osawatomie	Miami
Brown County	Brown	Halstead	Harvey	Rolla	Morton
Burlingame	Osage	Kismet-Plains	Seward	Shawnee Mission	Johnson
Deerfield	Kearny	Lansing	Leavenworth	Waconda	Mitchell
DeSoto	Johnson	Leoti	Wichita	West Elk	Elk

How does this district compare to the state's most efficient districts?

The following table compares Crest with two of the state's **efficient frontier** districts using two different criteria. The first comparison is made to the efficient frontier district with the most similar demographic constraints to this district. The second comparison is made to a similarly-sized efficient frontier district that spends no more than this district and produces the highest overall student performance.

		Most Similar	Best-Performing
	This	Frontier	Frontier
Indicator	District	District*	District**
District Name	Crest	Halstead	Leoti
District Code	D0479	D0440	D0467
County	Anderson	Harvey	Wichita
Enrollment	251	735	501
Constraints			
Economically Disadvantaged Students	44.7%	34.7%	39.5%
English Language Learners	0.0%	0.0%	26.5%
Students with Disabilities	18.5%	18.7%	12.4%
Inputs			
Core Spending (per student)	\$8,772	\$6,792	\$8,455
Outputs			
Reading and Math Proficiency Rate	71.2%	83.9%	88.1%
Reading (grades 3-8)	70.5%	87.0%	84.4%
Reading (high school)	90.0%	83.8%	84.0%
Math (grades 3-8)	76.1%	86.3%	94.8%
Math (high school)	44.7%	64.0%	78.7%
Reading and Math Performance Index	41.4%	55.8%	58.9%
Reading (grades 3-8)	42.4%	56.7%	54.4%
Reading (high school)	53.3%	55.3%	62.3%
Math (grades 3-8)	44.2%	59.6%	63.1%
Math (high school)	24.8%	41.1%	57.5%

* Efficient frontier district with most similar constraints as this district.

Kansas School District Efficiency Study

District: Cunningham (D0332)

Why was this profile produced?

Governor Sebelius and the Ewing Marion Kauffman Foundation commissioned Standard & Poor's to study the relative efficiency of the state's school districts. A key component of the study is this two-page profile, produced for each of the state's less efficient school districts to provide them with a resource to help in their efforts to become more efficient.

What is a relative efficiency score? What does this district's score mean?

The relative efficiency score is derived by examining the relationship between three variables: **inputs** – how much the district spends per pupil; **outputs** – how well the district's students perform in reading and math; and **constraints** – how many of the district's students have special needs (i.e., economically disadvantaged backgrounds, physical or learning disabilities, or limited English proficiency), which are common factors that are outside of a district's control but can affect its spending and achievement levels.

Using linear mathematics, the district's data are then compared to all other school districts in the state to determine its relative efficiency score. Districts with the highest ratio of outputs to inputs in light of their constraints are considered to be on the efficiency frontier, and receive relative efficiency scores of 100%. Accordingly, they are referred to as **efficient frontier** districts. This district's score means that it is **65.33%** as efficient as the state's most efficient districts, taking into account its particular combination of inputs, outputs, and constraints.

This District's **Relative Efficiency Score** = 65.33%

How could this district improve its efficiency score? As noted above, this district has produced less than 100% of the outputs that might have been expected for its level of inputs and constraints, based on the performance of other districts. Had the district been able to increase its outputs to the target values shown in the accompanying table, while maintaining its current level of inputs, it would have reached the **efficient frontier**. This district's unattainable proficiency output target (greater than 100%) indicates that reaching the efficient frontier would also require reducing inputs; improving outputs alone would not be sufficient.

Output Improvement Targets

Outputs	Actual Value	Target Value*
Proficiency Rate	75.4%	>100%
Performance Index	46.0%	75.7%

*Had this district achieved the target values, it would have received a 100% relative efficiency score.

Note: A target value of ">100%" indicates that output improvements alone are not sufficient; input reductions are also necessary.

Which data are included in the calculation of the district's efficiency score?

Inputs

- **Outputs**
- Core Spending
 (\$ per student spent on core day-to-day operations, adjusted for local differences in purchasing power)

Constraints (factors outside of the district's control)

- Enrollment of Economically Disadvantaged Students
- Enrollment of English Language Learners
- Enrollment of Students with Disabilities

- **Reading and Math Proficiency Rate** (percent of reading and math tests scoring at the "proficient" standard or higher)
- Reading and Math Performance Index

 (an index that goes beyond measuring proficiency by awarding points for all tests that score above the lowest level "basic",
 "proficient", "advanced", and "exemplary" with higher scores awarded more points than lower scores)

Kansas School District Efficiency Study

District: Cunningham (D0332)

Region: South Central Kansas (Kingman County)

Which Kansas districts are the most efficient?

A total of 21 districts across the state have been identified as **efficient frontier** districts (achieving relative efficiency scores of 100%); these are listed alphabetically in the following table. One (or more) of these districts may serve as the source of promising practices that might be replicated in order to improve this district's performance.

District	County	District	<u>County</u>	District	County
Arkansas City	Cowley	Dodge City	Ford	Lyons	Rice
Ashland	Clark	Gardner-Edgerton	Johnson	Newton	Harvey
Baldwin City	Douglas	Great Bend	Barton	Osawatomie	Miami
Brown County	Brown	Halstead	Harvey	Rolla	Morton
Burlingame	Osage	Kismet-Plains	Seward	Shawnee Mission	Johnson
Deerfield	Kearny	Lansing	Leavenworth	Waconda	Mitchell
DeSoto	Johnson	Leoti	Wichita	West Elk	Elk

How does this district compare to the state's most efficient districts?

The following table compares Cunningham with two of the state's **efficient frontier** districts using two different criteria. The first comparison is made to the efficient frontier district with the most similar demographic constraints to this district. The second comparison is made to a similarly-sized efficient frontier district that spends no more than this district and produces the highest overall student performance. In this case, the comparison district under both criteria is the same.

	This	Most Similar Frontier	Best-Performing Frontier
Indicator	District	District*	District**
District Name	Cunningham	Waconda	Waconda
District Code	D0332	D0272	D0272
County	Kingman	Mitchell	Mitchell
Enrollment	225	365	365
Constraints			
Economically Disadvantaged Students	39.2%	44.3%	44.3%
English Language Learners	0.0%	0.0%	0.0%
Students with Disabilities	13.8%	12.9%	12.9%
Inputs			
Core Spending (per student)	\$12,081	\$9,480	\$9,480
Outputs			
Reading and Math Proficiency Rate	75.4%	94.5%	94.5%
Reading (grades 3-8)	78.3%	96.9%	96.9%
Reading (high school)	84.0%	88.6%	88.6%
Math (grades 3-8)	76.1%	96.6%	96.6%
Math (high school)	66.4%	92.0%	92.0%
Reading and Math Performance Index	46.0%	70.2%	70.2%
Reading (grades 3-8)	53.5%	70.4%	70.4%
Reading (high school)	38.0%	61.8%	61.8%
Math (grades 3-8)	44.1%	77.0%	77.0%
Math (high school)	37.3%	64.0%	64.0%

* Efficient frontier district with most similar constraints as this district.

Kansas School District Efficiency Study

District: Derby (D0260)

Region: South Central Kansas (Sedgwick County)

Why was this profile produced?

Governor Sebelius and the Ewing Marion Kauffman Foundation commissioned Standard & Poor's to study the relative efficiency of the state's school districts. A key component of the study is this two-page profile, produced for each of the state's less efficient school districts to provide them with a resource to help in their efforts to become more efficient.

What is a relative efficiency score? What does this district's score mean?

The relative efficiency score is derived by examining the relationship between three variables: **inputs** – how much the district spends per pupil; **outputs** – how well the district's students perform in reading and math; and **constraints** – how many of the district's students have special needs (i.e., economically disadvantaged backgrounds, physical or learning disabilities, or limited English proficiency), which are common factors that are outside of a district's control but can affect its spending and achievement levels.

Using linear mathematics, the district's data are then compared to all other school districts in the state to determine its relative efficiency score. Districts with the highest ratio of outputs to inputs in light of their constraints are considered to be on the efficiency frontier, and receive relative efficiency scores of 100%. Accordingly, they are referred to as **efficient frontier** districts. This district's score means that it is **89.30%** as efficient as the state's most efficient districts, taking into account its particular combination of inputs, outputs, and constraints.

This District's **Relative Efficiency Score = 89.30%**

How could this district improve its efficiency score? As noted above, this district has produced less than 100% of the outputs that might have been expected for its level of inputs and constraints, based on the performance of other districts. Had the district been able to increase its outputs to the target values shown in the accompanying table, while maintaining its current level of inputs, it would have reached the **efficient frontier**.

Output Improvement Targets

Outputs	Actual Value	Target Value*
Proficiency Rate	71.5%	80.1%
Performance Index	43.6%	54.1%

*Had this district achieved the target values, it would have received a 100% relative efficiency score.

Which data are included in the calculation of the district's efficiency score?

Inputs

Core Spending
 (\$ per student spent on core day-to-day operations,

(\$ per student spent of core day-to-day operations, adjusted for local differences in purchasing power)

Constraints (factors outside of the district's control)

- Enrollment of Economically Disadvantaged Students
- Enrollment of English Language Learners
- Enrollment of Students with Disabilities

- **Reading and Math Proficiency Rate** (percent of reading and math tests scoring at the "proficient" standard or higher)
- Reading and Math Performance Index (an index that goes beyond measuring proficiency by awarding points for all tests that score above the lowest level – "basic", "proficient", "advanced", and "exemplary" – with higher scores awarded more points than lower scores)

Kansas School District Efficiency Study

District: Derby (D0260)

Region: South Central Kansas (Sedgwick County)

Which Kansas districts are the most efficient?

A total of 21 districts across the state have been identified as **efficient frontier** districts (achieving relative efficiency scores of 100%); these are listed alphabetically in the following table. One (or more) of these districts may serve as the source of promising practices that might be replicated in order to improve this district's performance.

District	<u>County</u>	District	<u>County</u>	District	County
Arkansas City	Cowley	Dodge City	Ford	Lyons	Rice
Ashland	Clark	Gardner-Edgerton	Johnson	Newton	Harvey
Baldwin City	Douglas	Great Bend	Barton	Osawatomie	Miami
Brown County	Brown	Halstead	Harvey	Rolla	Morton
Burlingame	Osage	Kismet-Plains	Seward	Shawnee Mission	Johnson
Deerfield	Kearny	Lansing	Leavenworth	Waconda	Mitchell
DeSoto	Johnson	Leoti	Wichita	West Elk	Elk

How does this district compare to the state's most efficient districts?

The following table compares Derby with two of the state's **efficient frontier** districts using two different criteria. The first comparison is made to the efficient frontier district with the most similar demographic constraints to this district. The second comparison is made to a similarly-sized efficient frontier district that spends no more than this district and produces the highest overall student performance.

		Most Similar	Best-Performing
	This	Frontier	Frontier
Indicator	District	District*	District**
District Name	Derby	Newton	Gardner-Edgerton
District Code	D0260	D0373	D0231
County	Sedgwick	Harvey	Johnson
Enrollment	6,626	3,731	3,782
Constraints			
Economically Disadvantaged Students	31.5%	45.5%	21.5%
English Language Learners	3.0%	5.9%	0.9%
Students with Disabilities	14.9%	15.4%	12.2%
Inputs			
Core Spending (per student)	\$6,077	\$5,915	\$5,565
Outputs			
Reading and Math Proficiency Rate	71.5%	75.1%	89.0%
Reading (grades 3-8)	76.7%	80.8%	88.9%
Reading (high school)	66.7%	72.8%	87.6%
Math (grades 3-8)	73.3%	76.7%	92.0%
Math (high school)	50.5%	55.1%	78.7%
Reading and Math Performance Index	43.6%	50.6%	61.5%
Reading (grades 3-8)	46.2%	54.7%	59.6%
Reading (high school)	39.9%	48.1%	63.8%
Math (grades 3-8)	45.6%	52.2%	65.9%
Math (high school)	30.8%	36.5%	50.3%

* Efficient frontier district with most similar constraints as this district.

Kansas School District Efficiency Study

District: Dexter (D0471)

Region: South Central Kansas (Cowley County)

Why was this profile produced?

Governor Sebelius and the Ewing Marion Kauffman Foundation commissioned Standard & Poor's to study the relative efficiency of the state's school districts. A key component of the study is this two-page profile, produced for each of the state's less efficient school districts to provide them with a resource to help in their efforts to become more efficient.

What is a relative efficiency score? What does this district's score mean?

The relative efficiency score is derived by examining the relationship between three variables: **inputs** – how much the district spends per pupil; **outputs** – how well the district's students perform in reading and math; and **constraints** – how many of the district's students have special needs (i.e., economically disadvantaged backgrounds, physical or learning disabilities, or limited English proficiency), which are common factors that are outside of a district's control but can affect its spending and achievement levels.

Using linear mathematics, the district's data are then compared to all other school districts in the state to determine its relative efficiency score. Districts with the highest ratio of outputs to inputs in light of their constraints are considered to be on the efficiency frontier, and receive relative efficiency scores of 100%. Accordingly, they are referred to as **efficient frontier** districts. This district's score means that it is **94.10%** as efficient as the state's most efficient districts, taking into account its particular combination of inputs, outputs, and constraints.

This District's **Relative Efficiency Score = 94.10%**

How could this district improve its efficiency score? As noted above, this district has produced less than 100% of the outputs that might have been expected for its level of inputs and constraints, based on the performance of other districts. Had the district been able to increase its outputs to the target values shown in the accompanying table, while maintaining its current level of inputs, it would have reached the **efficient frontier**.

Output Improvement Targets

Outputs	Actual Value	Target Value*
Proficiency Rate	84.9%	90.2%
Performance Index	54.1%	58.5%

*Had this district achieved the target values, it would have received a 100% relative efficiency score.

Which data are included in the calculation of the district's efficiency score?

Inputs

Core Spending
 (\$ per student spent on core

(\$ per student spent on core day-to-day operations, adjusted for local differences in purchasing power)

Constraints (factors outside of the district's control)

- Enrollment of Economically Disadvantaged Students
- Enrollment of English Language Learners
- Enrollment of Students with Disabilities

- Reading and Math Proficiency Rate (percent of reading and math tests scoring at the "proficient" standard or higher)
- Reading and Math Performance Index (an index that goes beyond measuring proficiency by awarding points for all tests that score above the lowest level – "basic", "proficient", "advanced", and "exemplary" – with higher scores awarded more points than lower scores)

Kansas School District Efficiency Study

District: Dexter (D0471)

Region: South Central Kansas (Cowley County)

Which Kansas districts are the most efficient?

A total of 21 districts across the state have been identified as **efficient frontier** districts (achieving relative efficiency scores of 100%); these are listed alphabetically in the following table. One (or more) of these districts may serve as the source of promising practices that might be replicated in order to improve this district's performance.

District	County	District	<u>County</u>	District	County
Arkansas City	Cowley	Dodge City	Ford	Lyons	Rice
Ashland	Clark	Gardner-Edgerton	Johnson	Newton	Harvey
Baldwin City	Douglas	Great Bend	Barton	Osawatomie	Miami
Brown County	Brown	Halstead	Harvey	Rolla	Morton
Burlingame	Osage	Kismet-Plains	Seward	Shawnee Mission	Johnson
Deerfield	Kearny	Lansing	Leavenworth	Waconda	Mitchell
DeSoto	Johnson	Leoti	Wichita	West Elk	Elk

How does this district compare to the state's most efficient districts?

The following table compares Dexter with two of the state's **efficient frontier** districts using two different criteria. The first comparison is made to the efficient frontier district with the most similar demographic constraints to this district. The second comparison is made to a similarly-sized efficient frontier district that spends no more than this district and produces the highest overall student performance.

	This	Most Similar Frontier	Best-Performing Frontier
Indicator	District	District*	District**
District Name	Dexter	Burlingame	Leoti
District Code	D0471	D0454	D0467
County	Cowley	Osage	Wichita
Enrollment	238	351	501
Constraints			
Economically Disadvantaged Students	41.8%	31.1%	39.5%
English Language Learners	0.0%	0.0%	26.5%
Students with Disabilities	17.0%	21.6%	12.4%
Inputs			
Core Spending (per student)	\$8,115	\$6,794	\$8,455
Outputs			
Reading and Math Proficiency Rate	84.9%	81.6%	88.1%
Reading (grades 3-8)	87.9%	82.1%	84.4%
Reading (high school)	77.7%	72.1%	84.0%
Math (grades 3-8)	86.5%	87.5%	94.8%
Math (high school)	66.5%	64.5%	78.7%
Reading and Math Performance Index	54.1%	48.3%	58.9%
Reading (grades 3-8)	55.3%	47.4%	54.4%
Reading (high school)	54.9%	40.8%	62.3%
Math (grades 3-8)	54.4%	53.7%	63.1%
Math (high school)	46.3%	35.7%	57.5%

* Efficient frontier district with most similar constraints as this district.

Kansas School District Efficiency Study

District: Dighton (D0482)

Region: Southwest Kansas (Lane County)

Why was this profile produced?

Governor Sebelius and the Ewing Marion Kauffman Foundation commissioned Standard & Poor's to study the relative efficiency of the state's school districts. A key component of the study is this two-page profile, produced for each of the state's less efficient school districts to provide them with a resource to help in their efforts to become more efficient.

What is a relative efficiency score? What does this district's score mean?

The relative efficiency score is derived by examining the relationship between three variables: **inputs** – how much the district spends per pupil; **outputs** – how well the district's students perform in reading and math; and **constraints** – how many of the district's students have special needs (i.e., economically disadvantaged backgrounds, physical or learning disabilities, or limited English proficiency), which are common factors that are outside of a district's control but can affect its spending and achievement levels.

Using linear mathematics, the district's data are then compared to all other school districts in the state to determine its relative efficiency score. Districts with the highest ratio of outputs to inputs in light of their constraints are considered to be on the efficiency frontier, and receive relative efficiency scores of 100%. Accordingly, they are referred to as **efficient frontier** districts. This district's score means that it is **85.77%** as efficient as the state's most efficient districts, taking into account its particular combination of inputs, outputs, and constraints.

This District's **Relative Efficiency Score** = 85.77%

How could this district improve its efficiency score? As noted above, this district has produced less than 100% of the outputs that might have been expected for its level of inputs and constraints, based on the performance of other districts. Had the district been able to increase its outputs to the target values shown in the accompanying table, while maintaining its current level of inputs, it would have reached the **efficient frontier**.

Output Improvement Targets

Outputs	Actual Value	Target Value*
Proficiency Rate	83.1%	96.9%
Performance Index	54.9%	64.0%

*Had this district achieved the target values, it would have received a 100% relative efficiency score.

Which data are included in the calculation of the district's efficiency score?

Inputs

Core Spending
 (\$ per student spent on core day-to-day operations,

adjusted for local differences in purchasing power)

Constraints (factors outside of the district's control)

- Enrollment of Economically Disadvantaged Students
- Enrollment of English Language Learners
- Enrollment of Students with Disabilities

- Reading and Math Proficiency Rate (percent of reading and math tests scoring at the "proficient" standard or higher)
- Reading and Math Performance Index (an index that goes beyond measuring proficiency by awarding points for all tests that score above the lowest level – "basic", "proficient", "advanced", and "exemplary" – with higher scores awarded more points than lower scores)

Kansas School District Efficiency Study

District: Dighton (D0482)

Region: Southwest Kansas (Lane County)

Which Kansas districts are the most efficient?

A total of 21 districts across the state have been identified as **efficient frontier** districts (achieving relative efficiency scores of 100%); these are listed alphabetically in the following table. One (or more) of these districts may serve as the source of promising practices that might be replicated in order to improve this district's performance.

District	<u>County</u>	District	<u>County</u>	District	County
Arkansas City	Cowley	Dodge City	Ford	Lyons	Rice
Ashland	Clark	Gardner-Edgerton	Johnson	Newton	Harvey
Baldwin City	Douglas	Great Bend	Barton	Osawatomie	Miami
Brown County	Brown	Halstead	Harvey	Rolla	Morton
Burlingame	Osage	Kismet-Plains	Seward	Shawnee Mission	Johnson
Deerfield	Kearny	Lansing	Leavenworth	Waconda	Mitchell
DeSoto	Johnson	Leoti	Wichita	West Elk	Elk

How does this district compare to the state's most efficient districts?

The following table compares Dighton with two of the state's **efficient frontier** districts using two different criteria. The first comparison is made to the efficient frontier district with the most similar demographic constraints to this district. The second comparison is made to a similarly-sized efficient frontier district that spends no more than this district and produces the highest overall student performance.

	This	Most Similar Frontier	Best-Performing Frontier
Indicator	District	District*	District**
District Name	Dighton	Halstead	Waconda
District Code	D0482	D0440	D0272
County	Lane	Harvey	Mitchell
Enrollment	258	735	365
Constraints			
Economically Disadvantaged Students	43.6%	34.7%	44.3%
English Language Learners	0.0%	0.0%	0.0%
Students with Disabilities	18.1%	18.7%	12.9%
Inputs			
Core Spending (per student)	\$9,398	\$6,792	\$9,480
Outputs			
Reading and Math Proficiency Rate	83.1%	83.9%	94.5%
Reading (grades 3-8)	94.5%	87.0%	96.9%
Reading (high school)	79.6%	83.8%	88.6%
Math (grades 3-8)	83.4%	86.3%	96.6%
Math (high school)	51.9%	64.0%	92.0%
Reading and Math Performance Index	54.9%	55.8%	70.2%
Reading (grades 3-8)	64.7%	56.7%	70.4%
Reading (high school)	52.0%	55.3%	61.8%
Math (grades 3-8)	56.7%	59.6%	77.0%
Math (high school)	26.0%	41.1%	64.0%

* Efficient frontier district with most similar constraints as this district.

Kansas School District Efficiency Study

District: Douglass (D0396)

Region: South Central Kansas (Butler County)

Why was this profile produced?

Governor Sebelius and the Ewing Marion Kauffman Foundation commissioned Standard & Poor's to study the relative efficiency of the state's school districts. A key component of the study is this two-page profile, produced for each of the state's less efficient school districts to provide them with a resource to help in their efforts to become more efficient.

What is a relative efficiency score? What does this district's score mean?

The relative efficiency score is derived by examining the relationship between three variables: **inputs** – how much the district spends per pupil; **outputs** – how well the district's students perform in reading and math; and **constraints** – how many of the district's students have special needs (i.e., economically disadvantaged backgrounds, physical or learning disabilities, or limited English proficiency), which are common factors that are outside of a district's control but can affect its spending and achievement levels.

Using linear mathematics, the district's data are then compared to all other school districts in the state to determine its relative efficiency score. Districts with the highest ratio of outputs to inputs in light of their constraints are considered to be on the efficiency frontier, and receive relative efficiency scores of 100%. Accordingly, they are referred to as **efficient frontier** districts. This district's score means that it is **80.01%** as efficient as the state's most efficient districts, taking into account its particular combination of inputs, outputs, and constraints.

This District's **Relative Efficiency Score** = 80.01%

How could this district improve its efficiency score? As noted above, this district has produced less than 100% of the outputs that might have been expected for its level of inputs and constraints, based on the performance of other districts. Had the district been able to increase its outputs to the target values shown in the accompanying table, while maintaining its current level of inputs, it would have reached the **efficient frontier**.

Output Improvement Targets

Outputs	Actual Value	Target Value*
Proficiency Rate	74.5%	93.1%
Performance Index	43.9%	63.5%

*Had this district achieved the target values, it would have received a 100% relative efficiency score.

Which data are included in the calculation of the district's efficiency score?

Inputs

Core Spending
 (\$ per student spent on cor

(\$ per student spent on core day-to-day operations, adjusted for local differences in purchasing power)

Constraints (factors outside of the district's control)

- Enrollment of Economically Disadvantaged Students
- Enrollment of English Language Learners
- Enrollment of Students with Disabilities

- Reading and Math Proficiency Rate (percent of reading and math tests scoring at the "proficient" standard or higher)
- Reading and Math Performance Index (an index that goes beyond measuring proficiency by awarding points for all tests that score above the lowest level – "basic", "proficient", "advanced", and "exemplary" – with higher scores awarded more points than lower scores)

Kansas School District Efficiency Study

District: Douglass (D0396)

Region: South Central Kansas (Butler County)

Which Kansas districts are the most efficient?

A total of 21 districts across the state have been identified as **efficient frontier** districts (achieving relative efficiency scores of 100%); these are listed alphabetically in the following table. One (or more) of these districts may serve as the source of promising practices that might be replicated in order to improve this district's performance.

District	County	District	<u>County</u>	District	County
Arkansas City	Cowley	Dodge City	Ford	Lyons	Rice
Ashland	Clark	Gardner-Edgerton	Johnson	Newton	Harvey
Baldwin City	Douglas	Great Bend	Barton	Osawatomie	Miami
Brown County	Brown	Halstead	Harvey	Rolla	Morton
Burlingame	Osage	Kismet-Plains	Seward	Shawnee Mission	Johnson
Deerfield	Kearny	Lansing	Leavenworth	Waconda	Mitchell
DeSoto	Johnson	Leoti	Wichita	West Elk	Elk

How does this district compare to the state's most efficient districts?

The following table compares Douglass with two of the state's **efficient frontier** districts using two different criteria. The first comparison is made to the efficient frontier district with the most similar demographic constraints to this district. The second comparison is made to a similarly-sized efficient frontier district that spends no more than this district and produces the highest overall student performance. In this case, the comparison district under both criteria is the same.

	This	Most Similar Frontier	Best-Performing Frontier
Indicator	District	District*	District**
District Name	Douglass	Baldwin City	Baldwin City
District Code	D0396	D0348	D0348
County	Butler	Douglas	Douglas
Enrollment	873	1,407	1,407
Constraints			
Economically Disadvantaged Students	26.6%	15.2%	15.2%
English Language Learners	0.1%	0.1%	0.1%
Students with Disabilities	9.1%	13.7%	13.7%
Inputs			
Core Spending (per student)	\$6,581	\$6,490	\$6,490
Outputs			
Reading and Math Proficiency Rate	74.5%	88.7%	88.7%
Reading (grades 3-8)	80.6%	94.3%	94.3%
Reading (high school)	76.3%	72.2%	72.2%
Math (grades 3-8)	78.6%	94.3%	94.3%
Math (high school)	46.7%	66.1%	66.1%
Reading and Math Performance Index	43.9%	64.0%	64.0%
Reading (grades 3-8)	47.3%	67.4%	67.4%
Reading (high school)	44.6%	44.6%	44.6%
Math (grades 3-8)	47.5%	74.1%	74.1%
Math (high school)	26.0%	40.1%	40.1%

* Efficient frontier district with most similar constraints as this district.

Kansas School District Efficiency Study

District: Durham-Hills (D0410)

Region: North Central Kansas (Marion County)

Why was this profile produced?

Governor Sebelius and the Ewing Marion Kauffman Foundation commissioned Standard & Poor's to study the relative efficiency of the state's school districts. A key component of the study is this two-page profile, produced for each of the state's less efficient school districts to provide them with a resource to help in their efforts to become more efficient.

What is a relative efficiency score? What does this district's score mean?

The relative efficiency score is derived by examining the relationship between three variables: **inputs** – how much the district spends per pupil; **outputs** – how well the district's students perform in reading and math; and **constraints** – how many of the district's students have special needs (i.e., economically disadvantaged backgrounds, physical or learning disabilities, or limited English proficiency), which are common factors that are outside of a district's control but can affect its spending and achievement levels.

Using linear mathematics, the district's data are then compared to all other school districts in the state to determine its relative efficiency score. Districts with the highest ratio of outputs to inputs in light of their constraints are considered to be on the efficiency frontier, and receive relative efficiency scores of 100%. Accordingly, they are referred to as **efficient frontier** districts. This district's score means that it is **99.99%** as efficient as the state's most efficient districts, taking into account its particular combination of inputs, outputs, and constraints.

This District's **Relative Efficiency Score = 99.99%**

How could this district improve its efficiency score? As noted above, this district has produced less than 100% of the outputs that might have been expected for its level of inputs and constraints, based on the performance of other districts. Had the district been able to increase its outputs to the target values shown in the accompanying table, while maintaining its current level of inputs, it would have reached the **efficient frontier**.

Output Improvement Targets

Outputs	Actual Value	Target Value*
Proficiency Rate	83.7%	84.0%
Performance Index	55.8%	55.8%

*Had this district achieved the target values, it would have received a 100% relative efficiency score.

Which data are included in the calculation of the district's efficiency score?

Inputs

Core Spending
 (\$ per student spent on cor

(\$ per student spent on core day-to-day operations, adjusted for local differences in purchasing power)

Constraints (factors outside of the district's control)

- Enrollment of Economically Disadvantaged Students
- Enrollment of English Language Learners
- Enrollment of Students with Disabilities

- **Reading and Math Proficiency Rate** (percent of reading and math tests scoring at the "proficient" standard or higher)
- Reading and Math Performance Index
 (an index that goes beyond measuring proficiency by awarding points for all tests that score above the lowest level – "basic",
 "proficient", "advanced", and "exemplary" – with higher scores awarded more points than lower scores)

Kansas School District Efficiency Study

District: Durham-Hills (D0410)

Region: North Central Kansas (Marion County)

Which Kansas districts are the most efficient?

A total of 21 districts across the state have been identified as **efficient frontier** districts (achieving relative efficiency scores of 100%); these are listed alphabetically in the following table. One (or more) of these districts may serve as the source of promising practices that might be replicated in order to improve this district's performance.

District	County	District	<u>County</u>	District	County
Arkansas City	Cowley	Dodge City	Ford	Lyons	Rice
Ashland	Clark	Gardner-Edgerton	Johnson	Newton	Harvey
Baldwin City	Douglas	Great Bend	Barton	Osawatomie	Miami
Brown County	Brown	Halstead	Harvey	Rolla	Morton
Burlingame	Osage	Kismet-Plains	Seward	Shawnee Mission	Johnson
Deerfield	Kearny	Lansing	Leavenworth	Waconda	Mitchell
DeSoto	Johnson	Leoti	Wichita	West Elk	Elk

How does this district compare to the state's most efficient districts?

The following table compares Durham-Hills with two of the state's **efficient frontier** districts using two different criteria. The first comparison is made to the efficient frontier district with the most similar demographic constraints to this district. The second comparison is made to a similarly-sized efficient frontier district that spends no more than this district and produces the highest overall student performance.

	This	Most Similar Frontier	Best-Performing Frontier
Indicator	District	District*	District**
District Name	Durham-Hills	Halstead	Baldwin City
District Code	D0410	D0440	D0348
County	Marion	Harvey	Douglas
Enrollment	706	735	1,407
Constraints			
Economically Disadvantaged Students	28.9%	34.7%	15.2%
English Language Learners	0.0%	0.0%	0.1%
Students with Disabilities	22.4%	18.7%	13.7%
Inputs			
Core Spending (per student)	\$7,794	\$6,792	\$6,490
Outputs			
Reading and Math Proficiency Rate	83.7%	83.9%	88.7%
Reading (grades 3-8)	85.4%	87.0%	94.3%
Reading (high school)	81.5%	83.8%	72.2%
Math (grades 3-8)	89.2%	86.3%	94.3%
Math (high school)	73.6%	64.0%	66.1%
Reading and Math Performance Index	55.8%	55.8%	64.0%
Reading (grades 3-8)	53.4%	56.7%	67.4%
Reading (high school)	62.4%	55.3%	44.6%
Math (grades 3-8)	60.7%	59.6%	74.1%
Math (high school)	50.6%	41.1%	40.1%

* Efficient frontier district with most similar constraints as this district.

Kansas School District Efficiency Study

District: Easton (D0449)

Region: Northeast Kansas (Leavenworth County)

Why was this profile produced?

Governor Sebelius and the Ewing Marion Kauffman Foundation commissioned Standard & Poor's to study the relative efficiency of the state's school districts. A key component of the study is this two-page profile, produced for each of the state's less efficient school districts to provide them with a resource to help in their efforts to become more efficient.

What is a relative efficiency score? What does this district's score mean?

The relative efficiency score is derived by examining the relationship between three variables: **inputs** – how much the district spends per pupil; **outputs** – how well the district's students perform in reading and math; and **constraints** – how many of the district's students have special needs (i.e., economically disadvantaged backgrounds, physical or learning disabilities, or limited English proficiency), which are common factors that are outside of a district's control but can affect its spending and achievement levels.

Using linear mathematics, the district's data are then compared to all other school districts in the state to determine its relative efficiency score. Districts with the highest ratio of outputs to inputs in light of their constraints are considered to be on the efficiency frontier, and receive relative efficiency scores of 100%. Accordingly, they are referred to as **efficient frontier** districts. This district's score means that it is **83.06%** as efficient as the state's most efficient districts, taking into account its particular combination of inputs, outputs, and constraints.

This District's **Relative Efficiency Score = 83.06%**

How could this district improve its efficiency score? As noted above, this district has produced less than 100% of the outputs that might have been expected for its level of inputs and constraints, based on the performance of other districts. Had the district been able to increase its outputs to the target values shown in the accompanying table, while maintaining its current level of inputs, it would have reached the **efficient frontier**.

Output Improvement Targets

Outputs	Actual Value	Target Value*
Proficiency Rate	76.3%	91.9%
Performance Index	46.7%	61.7%

*Had this district achieved the target values, it would have received a 100% relative efficiency score.

Which data are included in the calculation of the district's efficiency score?

Inputs

Core Spending

 (\$ per student spent on cor

(\$ per student spent on core day-to-day operations, adjusted for local differences in purchasing power)

<u>Constraints</u> (factors outside of the district's control)

- Enrollment of Economically Disadvantaged Students
- Enrollment of English Language Learners
- Enrollment of Students with Disabilities

- **Reading and Math Proficiency Rate** (percent of reading and math tests scoring at the "proficient" standard or higher)
- Reading and Math Performance Index (an index that goes beyond measuring proficiency by awarding points for all tests that score above the lowest level – "basic", "proficient", "advanced", and "exemplary" – with higher scores awarded more points than lower scores)

Kansas School District Efficiency Study

District: Easton (D0449)

Region: Northeast Kansas (Leavenworth County)

Which Kansas districts are the most efficient?

A total of 21 districts across the state have been identified as **efficient frontier** districts (achieving relative efficiency scores of 100%); these are listed alphabetically in the following table. One (or more) of these districts may serve as the source of promising practices that might be replicated in order to improve this district's performance.

District	County	District	<u>County</u>	District	County
Arkansas City	Cowley	Dodge City	Ford	Lyons	Rice
Ashland	Clark	Gardner-Edgerton	Johnson	Newton	Harvey
Baldwin City	Douglas	Great Bend	Barton	Osawatomie	Miami
Brown County	Brown	Halstead	Harvey	Rolla	Morton
Burlingame	Osage	Kismet-Plains	Seward	Shawnee Mission	Johnson
Deerfield	Kearny	Lansing	Leavenworth	Waconda	Mitchell
DeSoto	Johnson	Leoti	Wichita	West Elk	Elk

How does this district compare to the state's most efficient districts?

The following table compares Easton with two of the state's **efficient frontier** districts using two different criteria. The first comparison is made to the efficient frontier district with the most similar demographic constraints to this district. The second comparison is made to a similarly-sized efficient frontier district that spends no more than this district and produces the highest overall student performance.

	This	Most Similar Frontier	Best-Performing Frontier
Indicator	District	District*	District**
District Name	Easton	Baldwin City	Osawatomie
District Code	D0449	D0348	D0367
County	Leavenworth	Douglas	Miami
Enrollment	713	1,407	1,235
Constraints			
Economically Disadvantaged Students	18.7%	15.2%	50.8%
English Language Learners	0.0%	0.1%	0.0%
Students with Disabilities	12.8%	13.7%	15.3%
Inputs			
Core Spending (per student)	\$6,148	\$6,490	\$6,193
Outputs			
Reading and Math Proficiency Rate	76.3%	88.7%	75.5%
Reading (grades 3-8)	80.9%	94.3%	78.5%
Reading (high school)	84.0%	72.2%	78.4%
Math (grades 3-8)	76.6%	94.3%	81.4%
Math (high school)	54.1%	66.1%	39.7%
Reading and Math Performance Index	46.7%	64.0%	45.7%
Reading (grades 3-8)	49.1%	67.4%	48.0%
Reading (high school)	51.0%	44.6%	43.0%
Math (grades 3-8)	49.4%	74.1%	50.1%
Math (high school)	26.7%	40.1%	22.0%

* Efficient frontier district with most similar constraints as this district.

Kansas School District Efficiency Study

District: El Dorado (D0490)

Region: South Central Kansas (Butler County)

Why was this profile produced?

Governor Sebelius and the Ewing Marion Kauffman Foundation commissioned Standard & Poor's to study the relative efficiency of the state's school districts. A key component of the study is this two-page profile, produced for each of the state's less efficient school districts to provide them with a resource to help in their efforts to become more efficient.

What is a relative efficiency score? What does this district's score mean?

The relative efficiency score is derived by examining the relationship between three variables: **inputs** – how much the district spends per pupil; **outputs** – how well the district's students perform in reading and math; and **constraints** – how many of the district's students have special needs (i.e., economically disadvantaged backgrounds, physical or learning disabilities, or limited English proficiency), which are common factors that are outside of a district's control but can affect its spending and achievement levels.

Using linear mathematics, the district's data are then compared to all other school districts in the state to determine its relative efficiency score. Districts with the highest ratio of outputs to inputs in light of their constraints are considered to be on the efficiency frontier, and receive relative efficiency scores of 100%. Accordingly, they are referred to as **efficient frontier** districts. This district's score means that it is **79.07%** as efficient as the state's most efficient districts, taking into account its particular combination of inputs, outputs, and constraints.

This District's **Relative Efficiency Score** = **79.07%**

How could this district improve its efficiency score? As noted above, this district has produced less than 100% of the outputs that might have been expected for its level of inputs and constraints, based on the performance of other districts. Had the district been able to increase its outputs to the target values shown in the accompanying table, while maintaining its current level of inputs, it would have reached the **efficient frontier**.

Output Improvement Targets

Outputs	Actual Value	Target Value*
Proficiency Rate	61.3%	77.6%
Performance Index	34.9%	52.3%

*Had this district achieved the target values, it would have received a 100% relative efficiency score.

Which data are included in the calculation of the district's efficiency score?

Inputs

Core Spending

 (\$ per student spent on core

(\$ per student spent on core day-to-day operations, adjusted for local differences in purchasing power)

<u>Constraints</u> (factors outside of the district's control)

- Enrollment of Economically Disadvantaged Students
- Enrollment of English Language Learners
- Enrollment of Students with Disabilities

- Reading and Math Proficiency Rate (percent of reading and math tests scoring at the "proficient" standard or higher)
- Reading and Math Performance Index (an index that goes beyond measuring proficiency by awarding points for all tests that score above the lowest level – "basic", "proficient", "advanced", and "exemplary" – with higher scores awarded more points than lower scores)

Kansas School District Efficiency Study

District: El Dorado (D0490)

Region: South Central Kansas (Butler County)

Which Kansas districts are the most efficient?

A total of 21 districts across the state have been identified as **efficient frontier** districts (achieving relative efficiency scores of 100%); these are listed alphabetically in the following table. One (or more) of these districts may serve as the source of promising practices that might be replicated in order to improve this district's performance.

District	<u>County</u>	District	<u>County</u>	District	County
Arkansas City	Cowley	Dodge City	Ford	Lyons	Rice
Ashland	Clark	Gardner-Edgerton	Johnson	Newton	Harvey
Baldwin City	Douglas	Great Bend	Barton	Osawatomie	Miami
Brown County	Brown	Halstead	Harvey	Rolla	Morton
Burlingame	Osage	Kismet-Plains	Seward	Shawnee Mission	Johnson
Deerfield	Kearny	Lansing	Leavenworth	Waconda	Mitchell
DeSoto	Johnson	Leoti	Wichita	West Elk	Elk

How does this district compare to the state's most efficient districts?

The following table compares El Dorado with two of the state's **efficient frontier** districts using two different criteria. The first comparison is made to the efficient frontier district with the most similar demographic constraints to this district. The second comparison is made to a similarly-sized efficient frontier district that spends no more than this district and produces the highest overall student performance.

	This	Most Similar Frontier	Best-Performing Frontier
Indicator	District	District*	District**
District Name	El Dorado	Osawatomie	Gardner-Edgerton
District Code	D0490	D0367	D0231
County	Butler	Miami	Johnson
Enrollment	2,200	1,235	3,782
Constraints			
Economically Disadvantaged Students	38.5%	50.8%	21.5%
English Language Learners	0.1%	0.0%	0.9%
Students with Disabilities	15.6%	15.3%	12.2%
Inputs			
Core Spending (per student)	\$5,963	\$6,193	\$5,565
Outputs			
Reading and Math Proficiency Rate	61.3%	75.5%	89.0%
Reading (grades 3-8)	69.3%	78.5%	88.9%
Reading (high school)	52.8%	78.4%	87.6%
Math (grades 3-8)	62.2%	81.4%	92.0%
Math (high school)	40.9%	39.7%	78.7%
Reading and Math Performance Index	34.9%	45.7%	61.5%
Reading (grades 3-8)	40.1%	48.0%	59.6%
Reading (high school)	29.3%	43.0%	63.8%
Math (grades 3-8)	35.0%	50.1%	65.9%
Math (high school)	22.9%	22.0%	50.3%

* Efficient frontier district with most similar constraints as this district.

Kansas School District Efficiency Study

District: Elk Valley (D0283)

Region: Southeast Kansas (Elk County)

Why was this profile produced?

Governor Sebelius and the Ewing Marion Kauffman Foundation commissioned Standard & Poor's to study the relative efficiency of the state's school districts. A key component of the study is this two-page profile, produced for each of the state's less efficient school districts to provide them with a resource to help in their efforts to become more efficient.

What is a relative efficiency score? What does this district's score mean?

The relative efficiency score is derived by examining the relationship between three variables: **inputs** – how much the district spends per pupil; **outputs** – how well the district's students perform in reading and math; and **constraints** – how many of the district's students have special needs (i.e., economically disadvantaged backgrounds, physical or learning disabilities, or limited English proficiency), which are common factors that are outside of a district's control but can affect its spending and achievement levels.

Using linear mathematics, the district's data are then compared to all other school districts in the state to determine its relative efficiency score. Districts with the highest ratio of outputs to inputs in light of their constraints are considered to be on the efficiency frontier, and receive relative efficiency scores of 100%. Accordingly, they are referred to as **efficient frontier** districts. This district's score means that it is **90.22%** as efficient as the state's most efficient districts, taking into account its particular combination of inputs, outputs, and constraints.

This District's **Relative Efficiency Score** = 90.22%

How could this district improve its efficiency score? As noted above, this district has produced less than 100% of the outputs that might have been expected for its level of inputs and constraints, based on the performance of other districts. Had the district been able to increase its outputs to the target values shown in the accompanying table, while maintaining its current level of inputs, it would have reached the **efficient frontier**.

Output Improvement Targets

Outputs	Actual Value	Target Value*
Proficiency Rate	60.3%	66.8%
Performance Index	37.3%	42.6%

*Had this district achieved the target values, it would have received a 100% relative efficiency score.

Which data are included in the calculation of the district's efficiency score?

Inputs

Core Spending
 (\$ per student spent on c

(\$ per student spent on core day-to-day operations, adjusted for local differences in purchasing power)

<u>Constraints</u> (factors outside of the district's control)

- Enrollment of Economically Disadvantaged Students
- Enrollment of English Language Learners
- Enrollment of Students with Disabilities

- **Reading and Math Proficiency Rate** (percent of reading and math tests scoring at the "proficient" standard or higher)
- Reading and Math Performance Index
 (an index that goes beyond measuring proficiency by awarding points for all tests that score above the lowest level – "basic",
 "proficient", "advanced", and "exemplary" – with higher scores awarded more points than lower scores)

Kansas School District Efficiency Study

District: Elk Valley (D0283)

Region: Southeast Kansas (Elk County)

Which Kansas districts are the most efficient?

A total of 21 districts across the state have been identified as **efficient frontier** districts (achieving relative efficiency scores of 100%); these are listed alphabetically in the following table. One (or more) of these districts may serve as the source of promising practices that might be replicated in order to improve this district's performance.

District	County	District	<u>County</u>	District	County
Arkansas City	Cowley	Dodge City	Ford	Lyons	Rice
Ashland	Clark	Gardner-Edgerton	Johnson	Newton	Harvey
Baldwin City	Douglas	Great Bend	Barton	Osawatomie	Miami
Brown County	Brown	Halstead	Harvey	Rolla	Morton
Burlingame	Osage	Kismet-Plains	Seward	Shawnee Mission	Johnson
Deerfield	Kearny	Lansing	Leavenworth	Waconda	Mitchell
DeSoto	Johnson	Leoti	Wichita	West Elk	Elk

How does this district compare to the state's most efficient districts?

The following table compares Elk Valley with two of the state's **efficient frontier** districts using two different criteria. The first comparison is made to the efficient frontier district with the most similar demographic constraints to this district. The second comparison is made to a similarly-sized efficient frontier district that spends no more than this district and produces the highest overall student performance.

	This	Most Similar Frontier	Best-Performing Frontier
Indicator	District	District*	District**
District Name	Elk Valley	West Elk	Waconda
District Code	D0283	D0282	D0272
County	Elk	Elk	Mitchell
Enrollment	207	445	365
Constraints		•	
Economically Disadvantaged Students	69.4%	54.7%	44.3%
English Language Learners	0.0%	0.1%	0.0%
Students with Disabilities	25.4%	27.7%	12.9%
Inputs			
Core Spending (per student)	\$9,878	\$8,950	\$9,480
Outputs			
Reading and Math Proficiency Rate	60.3%	85.1%	94.5%
Reading (grades 3-8)	73.7%	89.0%	96.9%
Reading (high school)	64.8%	70.5%	88.6%
Math (grades 3-8)	58.8%	92.6%	96.6%
Math (high school)	30.6%	62.0%	92.0%
Reading and Math Performance Index	37.3%	56.6%	70.2%
Reading (grades 3-8)	45.4%	58.4%	70.4%
Reading (high school)	36.4%	40.3%	61.8%
Math (grades 3-8)	38.7%	66.4%	77.0%
Math (high school)	15.6%	34.7%	64.0%

* Efficient frontier district with most similar constraints as this district.

Kansas School District Efficiency Study

District: Elkhart (D0218)

Region: Southwest Kansas (Morton County)

Why was this profile produced?

Governor Sebelius and the Ewing Marion Kauffman Foundation commissioned Standard & Poor's to study the relative efficiency of the state's school districts. A key component of the study is this two-page profile, produced for each of the state's less efficient school districts to provide them with a resource to help in their efforts to become more efficient.

What is a relative efficiency score? What does this district's score mean?

The relative efficiency score is derived by examining the relationship between three variables: **inputs** – how much the district spends per pupil; **outputs** – how well the district's students perform in reading and math; and **constraints** – how many of the district's students have special needs (i.e., economically disadvantaged backgrounds, physical or learning disabilities, or limited English proficiency), which are common factors that are outside of a district's control but can affect its spending and achievement levels.

Using linear mathematics, the district's data are then compared to all other school districts in the state to determine its relative efficiency score. Districts with the highest ratio of outputs to inputs in light of their constraints are considered to be on the efficiency frontier, and receive relative efficiency scores of 100%. Accordingly, they are referred to as **efficient frontier** districts. This district's score means that it is **74.08%** as efficient as the state's most efficient districts, taking into account its particular combination of inputs, outputs, and constraints.

This District's **Relative Efficiency Score** = 74.08%

How could this district improve its efficiency score? As noted above, this district has produced less than 100% of the outputs that might have been expected for its level of inputs and constraints, based on the performance of other districts. Had the district been able to increase its outputs to the target values shown in the accompanying table, while maintaining its current level of inputs, it would have reached the **efficient frontier**.

Output Improvement Targets

Outputs	Actual Value	Target Value*
Proficiency Rate	66.9%	90.2%
Performance Index	38.6%	60.3%

*Had this district achieved the target values, it would have received a 100% relative efficiency score.

Which data are included in the calculation of the district's efficiency score?

Inputs

Core Spending
 (\$ per student spent on core day-to-day operations,

adjusted for local differences in purchasing power)

<u>Constraints</u> (factors outside of the district's control)

- Enrollment of Economically Disadvantaged Students
- Enrollment of English Language Learners
- Enrollment of Students with Disabilities

- Reading and Math Proficiency Rate (percent of reading and math tests scoring at the "proficient" standard or higher)
- Reading and Math Performance Index (an index that goes beyond measuring proficiency by awarding points for all tests that score above the lowest level – "basic", "proficient", "advanced", and "exemplary" – with higher scores awarded more points than lower scores)

Kansas School District Efficiency Study

District: Elkhart (D0218)

Region: Southwest Kansas (Morton County)

Which Kansas districts are the most efficient?

A total of 21 districts across the state have been identified as **efficient frontier** districts (achieving relative efficiency scores of 100%); these are listed alphabetically in the following table. One (or more) of these districts may serve as the source of promising practices that might be replicated in order to improve this district's performance.

District	<u>County</u>	District	<u>County</u>	District	County
Arkansas City	Cowley	Dodge City	Ford	Lyons	Rice
Ashland	Clark	Gardner-Edgerton	Johnson	Newton	Harvey
Baldwin City	Douglas	Great Bend	Barton	Osawatomie	Miami
Brown County	Brown	Halstead	Harvey	Rolla	Morton
Burlingame	Osage	Kismet-Plains	Seward	Shawnee Mission	Johnson
Deerfield	Kearny	Lansing	Leavenworth	Waconda	Mitchell
DeSoto	Johnson	Leoti	Wichita	West Elk	Elk

How does this district compare to the state's most efficient districts?

The following table compares Elkhart with two of the state's **efficient frontier** districts using two different criteria. The first comparison is made to the efficient frontier district with the most similar demographic constraints to this district. The second comparison is made to a similarly-sized efficient frontier district that spends no more than this district and produces the highest overall student performance.

	This	Most Similar Frontier	Best-Performing Frontier
Indicator	District	District*	District**
District Name	Elkhart	Kismet-Plains	Baldwin City
District Code	D0218	D0483	D0348
County	Morton	Seward	Douglas
Enrollment	746	731	1,407
Constraints			
Economically Disadvantaged Students	32.8%	62.0%	15.2%
English Language Learners	18.9%	36.3%	0.1%
Students with Disabilities	8.6%	11.5%	13.7%
Inputs			
Core Spending (per student)	\$8,494	\$7,745	\$6,490
Outputs			
Reading and Math Proficiency Rate	66.9%	63.3%	88.7%
Reading (grades 3-8)	74.4%	63.7%	94.3%
Reading (high school)	56.8%	64.2%	72.2%
Math (grades 3-8)	68.6%	65.2%	94.3%
Math (high school)	39.3%	53.7%	66.1%
Reading and Math Performance Index	38.6%	36.7%	64.0%
Reading (grades 3-8)	41.5%	34.1%	67.4%
Reading (high school)	35.9%	38.6%	44.6%
Math (grades 3-8)	39.7%	39.5%	74.1%
Math (high school)	25.8%	34.2%	40.1%

* Efficient frontier district with most similar constraints as this district.

Kansas School District Efficiency Study

District: Ellinwood (D0355)

Region: South Central Kansas (Barton County)

Why was this profile produced?

Governor Sebelius and the Ewing Marion Kauffman Foundation commissioned Standard & Poor's to study the relative efficiency of the state's school districts. A key component of the study is this two-page profile, produced for each of the state's less efficient school districts to provide them with a resource to help in their efforts to become more efficient.

What is a relative efficiency score? What does this district's score mean?

The relative efficiency score is derived by examining the relationship between three variables: **inputs** – how much the district spends per pupil; **outputs** – how well the district's students perform in reading and math; and **constraints** – how many of the district's students have special needs (i.e., economically disadvantaged backgrounds, physical or learning disabilities, or limited English proficiency), which are common factors that are outside of a district's control but can affect its spending and achievement levels.

Using linear mathematics, the district's data are then compared to all other school districts in the state to determine its relative efficiency score. Districts with the highest ratio of outputs to inputs in light of their constraints are considered to be on the efficiency frontier, and receive relative efficiency scores of 100%. Accordingly, they are referred to as **efficient frontier** districts. This district's score means that it is **80.63%** as efficient as the state's most efficient districts, taking into account its particular combination of inputs, outputs, and constraints.

This District's **Relative Efficiency Score = 80.63%**

How could this district improve its efficiency score? As noted above, this district has produced less than 100% of the outputs that might have been expected for its level of inputs and constraints, based on the performance of other districts. Had the district been able to increase its outputs to the target values shown in the accompanying table, while maintaining its current level of inputs, it would have reached the **efficient frontier**.

Output Improvement Targets

Outputs	Actual Value	Target Value*
Proficiency Rate	79.0%	98.0%
Performance Index	49.1%	61.1%

*Had this district achieved the target values, it would have received a 100% relative efficiency score.

Which data are included in the calculation of the district's efficiency score?

Inputs

Core Spending
 (\$ per student spent on core day-to-day operations,

(5 per student spent on core day-to-day operations, adjusted for local differences in purchasing power)

Constraints (factors outside of the district's control)

- Enrollment of Economically Disadvantaged Students
- Enrollment of English Language Learners
- Enrollment of Students with Disabilities

- Reading and Math Proficiency Rate (percent of reading and math tests scoring at the "proficient" standard or higher)
- Reading and Math Performance Index (an index that goes beyond measuring proficiency by awarding points for all tests that score above the lowest level – "basic", "proficient", "advanced", and "exemplary" – with higher scores awarded more points than lower scores)

Kansas School District Efficiency Study

District: Ellinwood (D0355)

Region: South Central Kansas (Barton County)

Which Kansas districts are the most efficient?

A total of 21 districts across the state have been identified as **efficient frontier** districts (achieving relative efficiency scores of 100%); these are listed alphabetically in the following table. One (or more) of these districts may serve as the source of promising practices that might be replicated in order to improve this district's performance.

District	County	District	<u>County</u>	District	County
Arkansas City	Cowley	Dodge City	Ford	Lyons	Rice
Ashland	Clark	Gardner-Edgerton	Johnson	Newton	Harvey
Baldwin City	Douglas	Great Bend	Barton	Osawatomie	Miami
Brown County	Brown	Halstead	Harvey	Rolla	Morton
Burlingame	Osage	Kismet-Plains	Seward	Shawnee Mission	Johnson
Deerfield	Kearny	Lansing	Leavenworth	Waconda	Mitchell
DeSoto	Johnson	Leoti	Wichita	West Elk	Elk

How does this district compare to the state's most efficient districts?

The following table compares Ellinwood with two of the state's **efficient frontier** districts using two different criteria. The first comparison is made to the efficient frontier district with the most similar demographic constraints to this district. The second comparison is made to a similarly-sized efficient frontier district that spends no more than this district and produces the highest overall student performance.

Indicator	This District	Most Similar Frontier District*	Best-Performing Frontier District**
District Name	Ellinwood	Waconda	Baldwin City
District Code	D0355	D0272	D0348
County	Barton	Mitchell	Douglas
Enrollment	561	365	1,407
Constraints	501	303	1,407
	41.20/	44.3%	15.20/
Economically Disadvantaged Students	41.3%		15.2%
English Language Learners	0.0%	0.0%	0.1%
Students with Disabilities	10.5%	12.9%	13.7%
Inputs			
Core Spending (per student)	\$8,895	\$9,480	\$6,490
Outputs			
Reading and Math Proficiency Rate	79.0%	94.5%	88.7%
Reading (grades 3-8)	86.2%	96.9%	94.3%
Reading (high school)	72.0%	88.6%	72.2%
Math (grades 3-8)	81.8%	96.6%	94.3%
Math (high school)	70.0%	92.0%	66.1%
Reading and Math Performance Index	49.1%	70.2%	64.0%
Reading (grades 3-8)	55.7%	70.4%	67.4%
Reading (high school)	41.8%	61.8%	44.6%
Math (grades 3-8)	50.7%	77.0%	74.1%
Math (high school)	42.0%	64.0%	40.1%

* Efficient frontier district with most similar constraints as this district.

Kansas School District Efficiency Study

District: Ellis (D0388)

Region: Northwest Kansas (Ellis County)

Why was this profile produced?

Governor Sebelius and the Ewing Marion Kauffman Foundation commissioned Standard & Poor's to study the relative efficiency of the state's school districts. A key component of the study is this two-page profile, produced for each of the state's less efficient school districts to provide them with a resource to help in their efforts to become more efficient.

What is a relative efficiency score? What does this district's score mean?

The relative efficiency score is derived by examining the relationship between three variables: **inputs** – how much the district spends per pupil; **outputs** – how well the district's students perform in reading and math; and **constraints** – how many of the district's students have special needs (i.e., economically disadvantaged backgrounds, physical or learning disabilities, or limited English proficiency), which are common factors that are outside of a district's control but can affect its spending and achievement levels.

Using linear mathematics, the district's data are then compared to all other school districts in the state to determine its relative efficiency score. Districts with the highest ratio of outputs to inputs in light of their constraints are considered to be on the efficiency frontier, and receive relative efficiency scores of 100%. Accordingly, they are referred to as **efficient frontier** districts. This district's score means that it is **85.67%** as efficient as the state's most efficient districts, taking into account its particular combination of inputs, outputs, and constraints.

This District's **Relative Efficiency Score** = 85.67%

How could this district improve its efficiency score? As noted above, this district has produced less than 100% of the outputs that might have been expected for its level of inputs and constraints, based on the performance of other districts. Had the district been able to increase its outputs to the target values shown in the accompanying table, while maintaining its current level of inputs, it would have reached the **efficient frontier**. This district's unattainable proficiency output target (greater than 100%) indicates that reaching the efficient frontier would also require reducing inputs; improving outputs alone would not be sufficient.

Output Improvement Targets

Outputs	Actual Value	Target Value*
Proficiency Rate	87.7%	>100%
Performance Index	60.5%	70.6%

*Had this district achieved the target values, it would have received a 100% relative efficiency score.

Note: A target value of ">100%" indicates that output improvements alone are not sufficient; input reductions are also necessary.

Which data are included in the calculation of the district's efficiency score?

Inputs

- **Outputs**
- Core Spending
 (\$ per student spent on core day-to-day operations, adjusted for local differences in purchasing power)

Constraints (factors outside of the district's control)

- Enrollment of Economically Disadvantaged Students
- Enrollment of English Language Learners
- Enrollment of Students with Disabilities

- Reading and Math Proficiency Rate (percent of reading and math tests scoring at the "proficient" standard or higher)
- Reading and Math Performance Index

 (an index that goes beyond measuring proficiency by awarding points for all tests that score above the lowest level "basic",
 "proficient", "advanced", and "exemplary" with higher scores awarded more points than lower scores)

Kansas School District Efficiency Study

District: Ellis (D0388)

Region: Northwest Kansas (Ellis County)

Which Kansas districts are the most efficient?

A total of 21 districts across the state have been identified as **efficient frontier** districts (achieving relative efficiency scores of 100%); these are listed alphabetically in the following table. One (or more) of these districts may serve as the source of promising practices that might be replicated in order to improve this district's performance.

District	County	District	County	District	County
Arkansas City	Cowley	Dodge City	Ford	Lyons	Rice
Ashland	Clark	Gardner-Edgerton	Johnson	Newton	Harvey
Baldwin City	Douglas	Great Bend	Barton	Osawatomie	Miami
Brown County	Brown	Halstead	Harvey	Rolla	Morton
Burlingame	Osage	Kismet-Plains	Seward	Shawnee Mission	Johnson
Deerfield	Kearny	Lansing	Leavenworth	Waconda	Mitchell
DeSoto	Johnson	Leoti	Wichita	West Elk	Elk

How does this district compare to the state's most efficient districts?

The following table compares Ellis with two of the state's **efficient frontier** districts using two different criteria. The first comparison is made to the efficient frontier district with the most similar demographic constraints to this district. The second comparison is made to a similarly-sized efficient frontier district that spends no more than this district and produces the highest overall student performance. In this case, the comparison district under both criteria is the same.

	This	Most Similar Frontier	Best-Performing Frontier
Indicator	District	District*	District**
District Name	Ellis	Waconda	Waconda
District Code	D0388	D0272	D0272
County	Ellis	Mitchell	Mitchell
Enrollment	405	365	365
Constraints			
Economically Disadvantaged Students	32.1%	44.3%	44.3%
English Language Learners	0.0%	0.0%	0.0%
Students with Disabilities	14.9%	12.9%	12.9%
Inputs			
Core Spending (per student)	\$9,215	\$9,480	\$9,480
Outputs			
Reading and Math Proficiency Rate	87.7%	94.5%	94.5%
Reading (grades 3-8)	94.5%	96.9%	96.9%
Reading (high school)	81.3%	88.6%	88.6%
Math (grades 3-8)	85.0%	96.6%	96.6%
Math (high school)	81.3%	92.0%	92.0%
Reading and Math Performance Index	60.5%	70.2%	70.2%
Reading (grades 3-8)	67.3%	70.4%	70.4%
Reading (high school)	56.8%	61.8%	61.8%
Math (grades 3-8)	56.9%	77.0%	77.0%
Math (high school)	53.2%	64.0%	64.0%

* Efficient frontier district with most similar constraints as this district.

Kansas School District Efficiency Study

District: Ell-Saline (D0307)

Region: North Central Kansas (Saline County)

Why was this profile produced?

Governor Sebelius and the Ewing Marion Kauffman Foundation commissioned Standard & Poor's to study the relative efficiency of the state's school districts. A key component of the study is this two-page profile, produced for each of the state's less efficient school districts to provide them with a resource to help in their efforts to become more efficient.

What is a relative efficiency score? What does this district's score mean?

The relative efficiency score is derived by examining the relationship between three variables: **inputs** – how much the district spends per pupil; **outputs** – how well the district's students perform in reading and math; and **constraints** – how many of the district's students have special needs (i.e., economically disadvantaged backgrounds, physical or learning disabilities, or limited English proficiency), which are common factors that are outside of a district's control but can affect its spending and achievement levels.

Using linear mathematics, the district's data are then compared to all other school districts in the state to determine its relative efficiency score. Districts with the highest ratio of outputs to inputs in light of their constraints are considered to be on the efficiency frontier, and receive relative efficiency scores of 100%. Accordingly, they are referred to as **efficient frontier** districts. This district's score means that it is **65.71%** as efficient as the state's most efficient districts, taking into account its particular combination of inputs, outputs, and constraints.

This District's **Relative Efficiency Score** = 65.71%

How could this district improve its efficiency score? As noted above, this district has produced less than 100% of the outputs that might have been expected for its level of inputs and constraints, based on the performance of other districts. Had the district been able to increase its outputs to the target values shown in the accompanying table, while maintaining its current level of inputs, it would have reached the **efficient frontier**. This district's unattainable proficiency output target (greater than 100%) indicates that reaching the efficient frontier would also require reducing inputs; improving outputs alone would not be sufficient.

Output Improvement Targets

Outputs	Actual Value	Target Value*
Proficiency Rate	70.6%	>100%
Performance Index	45.1%	72.7%

*Had this district achieved the target values, it would have received a 100% relative efficiency score.

Note: A target value of ">100%" indicates that output improvements alone are not sufficient; input reductions are also necessary.

Which data are included in the calculation of the district's efficiency score?

Inputs

- **Outputs**
- Core Spending
 (\$ per student spent on core day-to-day operations, adjusted for local differences in purchasing power)

Constraints (factors outside of the district's control)

- Enrollment of Economically Disadvantaged Students
- Enrollment of English Language Learners
- Enrollment of Students with Disabilities

- Reading and Math Proficiency Rate (percent of reading and math tests scoring at the "proficient" standard or higher)
- Reading and Math Performance Index

 (an index that goes beyond measuring proficiency by awarding points for all tests that score above the lowest level "basic",
 "proficient", "advanced", and "exemplary" with higher scores awarded more points than lower scores)

Kansas School District Efficiency Study

District: Ell-Saline (D0307)

Region: North Central Kansas (Saline County)

Which Kansas districts are the most efficient?

A total of 21 districts across the state have been identified as **efficient frontier** districts (achieving relative efficiency scores of 100%); these are listed alphabetically in the following table. One (or more) of these districts may serve as the source of promising practices that might be replicated in order to improve this district's performance.

District	<u>County</u>	District	<u>County</u>	District	County
Arkansas City	Cowley	Dodge City	Ford	Lyons	Rice
Ashland	Clark	Gardner-Edgerton	Johnson	Newton	Harvey
Baldwin City	Douglas	Great Bend	Barton	Osawatomie	Miami
Brown County	Brown	Halstead	Harvey	Rolla	Morton
Burlingame	Osage	Kismet-Plains	Seward	Shawnee Mission	Johnson
Deerfield	Kearny	Lansing	Leavenworth	Waconda	Mitchell
DeSoto	Johnson	Leoti	Wichita	West Elk	Elk

How does this district compare to the state's most efficient districts?

The following table compares Ell-Saline with two of the state's **efficient frontier** districts using two different criteria. The first comparison is made to the efficient frontier district with the most similar demographic constraints to this district. The second comparison is made to a similarly-sized efficient frontier district that spends no more than this district and produces the highest overall student performance.

	7DL * -	Most Similar	Best-Performing
Indicator	This District	Frontier District*	Frontier District**
District Name	Ell-Saline	Waconda	Baldwin City
District Code	D0307	D0272	D0348
County	Saline	Mitchell	Douglas
Enrollment	471	365	1,407
Constraints			
Economically Disadvantaged Students	27.9%	44.3%	15.2%
English Language Learners	0.0%	0.0%	0.1%
Students with Disabilities	10.2%	12.9%	13.7%
Inputs			
Core Spending (per student)	\$8,136	\$9,480	\$6,490
Outputs			
Reading and Math Proficiency Rate	70.6%	94.5%	88.7%
Reading (grades 3-8)	79.7%	96.9%	94.3%
Reading (high school)	66.3%	88.6%	72.2%
Math (grades 3-8)	70.0%	96.6%	94.3%
Math (high school)	38.7%	92.0%	66.1%
Reading and Math Performance Index	45.1%	70.2%	64.0%
Reading (grades 3-8)	51.8%	70.4%	67.4%
Reading (high school)	46.5%	61.8%	44.6%
Math (grades 3-8)	43.4%	77.0%	74.1%
Math (high school)	24.2%	64.0%	40.1%

* Efficient frontier district with most similar constraints as this district.

Kansas School District Efficiency Study

District: Ellsworth (D0327)

Region: North Central Kansas (Ellsworth County)

Why was this profile produced?

Governor Sebelius and the Ewing Marion Kauffman Foundation commissioned Standard & Poor's to study the relative efficiency of the state's school districts. A key component of the study is this two-page profile, produced for each of the state's less efficient school districts to provide them with a resource to help in their efforts to become more efficient.

What is a relative efficiency score? What does this district's score mean?

The relative efficiency score is derived by examining the relationship between three variables: **inputs** – how much the district spends per pupil; **outputs** – how well the district's students perform in reading and math; and **constraints** – how many of the district's students have special needs (i.e., economically disadvantaged backgrounds, physical or learning disabilities, or limited English proficiency), which are common factors that are outside of a district's control but can affect its spending and achievement levels.

Using linear mathematics, the district's data are then compared to all other school districts in the state to determine its relative efficiency score. Districts with the highest ratio of outputs to inputs in light of their constraints are considered to be on the efficiency frontier, and receive relative efficiency scores of 100%. Accordingly, they are referred to as **efficient frontier** districts. This district's score means that it is **75.84%** as efficient as the state's most efficient districts, taking into account its particular combination of inputs, outputs, and constraints.

This District's **Relative Efficiency Score** = **75.84%**

How could this district improve its efficiency score? As noted above, this district has produced less than 100% of the outputs that might have been expected for its level of inputs and constraints, based on the performance of other districts. Had the district been able to increase its outputs to the target values shown in the accompanying table, while maintaining its current level of inputs, it would have reached the **efficient frontier**. This district's unattainable proficiency output target (greater than 100%) indicates that reaching the efficient frontier would also require reducing inputs; improving outputs alone would not be sufficient.

Output Improvement Targets

Outputs	Actual Value	Target Value*
Proficiency Rate	76.8%	>100%
Performance Index	47.2%	63.0%

*Had this district achieved the target values, it would have received a 100% relative efficiency score.

Note: A target value of ">100%" indicates that output improvements alone are not sufficient; input reductions are also necessary.

Which data are included in the calculation of the district's efficiency score?

Inputs

- **Outputs**
- Core Spending
 (\$ per student spent on core day-to-day operations, adjusted for local differences in purchasing power)

Constraints (factors outside of the district's control)

- Enrollment of Economically Disadvantaged Students
- Enrollment of English Language Learners
- Enrollment of Students with Disabilities

- Reading and Math Proficiency Rate (percent of reading and math tests scoring at the "proficient" standard or higher)
- Reading and Math Performance Index

 (an index that goes beyond measuring proficiency by awarding points for all tests that score above the lowest level "basic",
 "proficient", "advanced", and "exemplary" with higher scores awarded more points than lower scores)

Kansas School District Efficiency Study

District: Ellsworth (D0327)

Region: North Central Kansas (Ellsworth County)

Which Kansas districts are the most efficient?

A total of 21 districts across the state have been identified as **efficient frontier** districts (achieving relative efficiency scores of 100%); these are listed alphabetically in the following table. One (or more) of these districts may serve as the source of promising practices that might be replicated in order to improve this district's performance.

District	County	District	<u>County</u>	District	County
Arkansas City	Cowley	Dodge City	Ford	Lyons	Rice
Ashland	Clark	Gardner-Edgerton	Johnson	Newton	Harvey
Baldwin City	Douglas	Great Bend	Barton	Osawatomie	Miami
Brown County	Brown	Halstead	Harvey	Rolla	Morton
Burlingame	Osage	Kismet-Plains	Seward	Shawnee Mission	Johnson
Deerfield	Kearny	Lansing	Leavenworth	Waconda	Mitchell
DeSoto	Johnson	Leoti	Wichita	West Elk	Elk

How does this district compare to the state's most efficient districts?

The following table compares Ellsworth with two of the state's **efficient frontier** districts using two different criteria. The first comparison is made to the efficient frontier district with the most similar demographic constraints to this district. The second comparison is made to a similarly-sized efficient frontier district that spends no more than this district and produces the highest overall student performance.

	This	Most Similar Frontier	Best-Performing Frontier
Indicator	District	District*	District**
District Name	Ellsworth	Halstead	Baldwin City
District Code	D0327	D0440	D0348
County	Ellsworth	Harvey	Douglas
Enrollment	615	735	1,407
Constraints			
Economically Disadvantaged Students	27.9%	34.7%	15.2%
English Language Learners	0.0%	0.0%	0.1%
Students with Disabilities	15.9%	18.7%	13.7%
Inputs			
Core Spending (per student)	\$8,466	\$6,792	\$6,490
Outputs			
Reading and Math Proficiency Rate	76.8%	83.9%	88.7%
Reading (grades 3-8)	80.8%	87.0%	94.3%
Reading (high school)	73.7%	83.8%	72.2%
Math (grades 3-8)	75.8%	86.3%	94.3%
Math (high school)	74.6%	64.0%	66.1%
Reading and Math Performance Index	47.2%	55.8%	64.0%
Reading (grades 3-8)	49.8%	56.7%	67.4%
Reading (high school)	41.5%	55.3%	44.6%
Math (grades 3-8)	45.9%	59.6%	74.1%
Math (high school)	52.0%	41.1%	40.1%

* Efficient frontier district with most similar constraints as this district.

Kansas School District Efficiency Study

District: Elwood (D0486)

Region: Northeast Kansas (Doniphan County)

Why was this profile produced?

Governor Sebelius and the Ewing Marion Kauffman Foundation commissioned Standard & Poor's to study the relative efficiency of the state's school districts. A key component of the study is this two-page profile, produced for each of the state's less efficient school districts to provide them with a resource to help in their efforts to become more efficient.

What is a relative efficiency score? What does this district's score mean?

The relative efficiency score is derived by examining the relationship between three variables: **inputs** – how much the district spends per pupil; **outputs** – how well the district's students perform in reading and math; and **constraints** – how many of the district's students have special needs (i.e., economically disadvantaged backgrounds, physical or learning disabilities, or limited English proficiency), which are common factors that are outside of a district's control but can affect its spending and achievement levels.

Using linear mathematics, the district's data are then compared to all other school districts in the state to determine its relative efficiency score. Districts with the highest ratio of outputs to inputs in light of their constraints are considered to be on the efficiency frontier, and receive relative efficiency scores of 100%. Accordingly, they are referred to as **efficient frontier** districts. This district's score means that it is **72.16%** as efficient as the state's most efficient districts, taking into account its particular combination of inputs, outputs, and constraints.

This District's **Relative Efficiency Score** = 72.16%

How could this district improve its efficiency score? As noted above, this district has produced less than 100% of the outputs that might have been expected for its level of inputs and constraints, based on the performance of other districts. Had the district been able to increase its outputs to the target values shown in the accompanying table, while maintaining its current level of inputs, it would have reached the **efficient frontier**.

Output Improvement Targets

Outputs	Actual Value	Target Value*
Proficiency Rate	55.8%	77.3%
Performance Index	28.1%	49.9%

*Had this district achieved the target values, it would have received a 100% relative efficiency score.

Which data are included in the calculation of the district's efficiency score?

Inputs

Core Spending
 (\$ per student spent on core day-to-day operations,

adjusted for local differences in purchasing power)

Constraints (factors outside of the district's control)

- Enrollment of Economically Disadvantaged Students
- Enrollment of English Language Learners
- Enrollment of Students with Disabilities

- **Reading and Math Proficiency Rate** (percent of reading and math tests scoring at the "proficient" standard or higher)
- Reading and Math Performance Index (an index that goes beyond measuring proficiency by awarding points for all tests that score above the lowest level – "basic", "proficient", "advanced", and "exemplary" – with higher scores awarded more points than lower scores)

Kansas School District Efficiency Study

District: Elwood (D0486)

Region: Northeast Kansas (Doniphan County)

Which Kansas districts are the most efficient?

A total of 21 districts across the state have been identified as **efficient frontier** districts (achieving relative efficiency scores of 100%); these are listed alphabetically in the following table. One (or more) of these districts may serve as the source of promising practices that might be replicated in order to improve this district's performance.

District	<u>County</u>	District	<u>County</u>	District	County
Arkansas City	Cowley	Dodge City	Ford	Lyons	Rice
Ashland	Clark	Gardner-Edgerton	Johnson	Newton	Harvey
Baldwin City	Douglas	Great Bend	Barton	Osawatomie	Miami
Brown County	Brown	Halstead	Harvey	Rolla	Morton
Burlingame	Osage	Kismet-Plains	Seward	Shawnee Mission	Johnson
Deerfield	Kearny	Lansing	Leavenworth	Waconda	Mitchell
DeSoto	Johnson	Leoti	Wichita	West Elk	Elk

How does this district compare to the state's most efficient districts?

The following table compares Elwood with two of the state's **efficient frontier** districts using two different criteria. The first comparison is made to the efficient frontier district with the most similar demographic constraints to this district. The second comparison is made to a similarly-sized efficient frontier district that spends no more than this district and produces the highest overall student performance. In this case, the comparison district under both criteria is the same.

	This	Most Similar Frontier	Best-Performing Frontier
Indicator	District	District*	District**
District Name	Elwood	Halstead	Halstead
District Code	D0486	D0440	D0440
County	Doniphan	Harvey	Harvey
Enrollment	310	735	735
Constraints			
Economically Disadvantaged Students	56.5%	34.7%	34.7%
English Language Learners	0.0%	0.0%	0.0%
Students with Disabilities	16.8%	18.7%	18.7%
Inputs			
Core Spending (per student)	\$7,523	\$6,792	\$6,792
Outputs			
Reading and Math Proficiency Rate	55.8%	83.9%	83.9%
Reading (grades 3-8)	57.6%	87.0%	87.0%
Reading (high school)	48.2%	83.8%	83.8%
Math (grades 3-8)	60.3%	86.3%	86.3%
Math (high school)	38.4%	64.0%	64.0%
Reading and Math Performance Index	28.1%	55.8%	55.8%
Reading (grades 3-8)	30.7%	56.7%	56.7%
Reading (high school)	22.6%	55.3%	55.3%
Math (grades 3-8)	28.7%	59.6%	59.6%
Math (high school)	21.5%	41.1%	41.1%

* Efficient frontier district with most similar constraints as this district.

Kansas School District Efficiency Study

District: Emporia (D0253)

Region: Northeast Kansas (Lyon County)

Why was this profile produced?

Governor Sebelius and the Ewing Marion Kauffman Foundation commissioned Standard & Poor's to study the relative efficiency of the state's school districts. A key component of the study is this two-page profile, produced for each of the state's less efficient school districts to provide them with a resource to help in their efforts to become more efficient.

What is a relative efficiency score? What does this district's score mean?

The relative efficiency score is derived by examining the relationship between three variables: **inputs** – how much the district spends per pupil; **outputs** – how well the district's students perform in reading and math; and **constraints** – how many of the district's students have special needs (i.e., economically disadvantaged backgrounds, physical or learning disabilities, or limited English proficiency), which are common factors that are outside of a district's control but can affect its spending and achievement levels.

Using linear mathematics, the district's data are then compared to all other school districts in the state to determine its relative efficiency score. Districts with the highest ratio of outputs to inputs in light of their constraints are considered to be on the efficiency frontier, and receive relative efficiency scores of 100%. Accordingly, they are referred to as **efficient frontier** districts. This district's score means that it is **98.67%** as efficient as the state's most efficient districts, taking into account its particular combination of inputs, outputs, and constraints.

This District's **Relative Efficiency Score = 98.67%**

How could this district improve its efficiency score? As noted above, this district has produced less than 100% of the outputs that might have been expected for its level of inputs and constraints, based on the performance of other districts. Had the district been able to increase its outputs to the target values shown in the accompanying table, while maintaining its current level of inputs, it would have reached the **efficient frontier**.

Output Improvement Targets

Outputs	Actual Value	Target Value*
Proficiency Rate	65.8%	66.7%
Performance Index	39.7%	43.0%

*Had this district achieved the target values, it would have received a 100% relative efficiency score.

Which data are included in the calculation of the district's efficiency score?

Inputs

Core Spending

 (\$ per student spent on c

(\$ per student spent on core day-to-day operations, adjusted for local differences in purchasing power)

Constraints (factors outside of the district's control)

- Enrollment of Economically Disadvantaged Students
- Enrollment of English Language Learners
- Enrollment of Students with Disabilities

- Reading and Math Proficiency Rate (percent of reading and math tests scoring at the "proficient" standard or higher)
- Reading and Math Performance Index (an index that goes beyond measuring proficiency by awarding points for all tests that score above the lowest level – "basic", "proficient", "advanced", and "exemplary" – with higher scores awarded more points than lower scores)

Kansas School District Efficiency Study

District: Emporia (D0253)

Region: Northeast Kansas (Lyon County)

Which Kansas districts are the most efficient?

A total of 21 districts across the state have been identified as **efficient frontier** districts (achieving relative efficiency scores of 100%); these are listed alphabetically in the following table. One (or more) of these districts may serve as the source of promising practices that might be replicated in order to improve this district's performance.

District	<u>County</u>	District	<u>County</u>	District	County
Arkansas City	Cowley	Dodge City	Ford	Lyons	Rice
Ashland	Clark	Gardner-Edgerton	Johnson	Newton	Harvey
Baldwin City	Douglas	Great Bend	Barton	Osawatomie	Miami
Brown County	Brown	Halstead	Harvey	Rolla	Morton
Burlingame	Osage	Kismet-Plains	Seward	Shawnee Mission	Johnson
Deerfield	Kearny	Lansing	Leavenworth	Waconda	Mitchell
DeSoto	Johnson	Leoti	Wichita	West Elk	Elk

How does this district compare to the state's most efficient districts?

The following table compares Emporia with two of the state's **efficient frontier** districts using two different criteria. The first comparison is made to the efficient frontier district with the most similar demographic constraints to this district. The second comparison is made to a similarly-sized efficient frontier district that spends no more than this district and produces the highest overall student performance.

Indicator	This District	Most Similar Frontier District*	Best-Performing Frontier District**
District Name	Emporia	Dodge City	Gardner-Edgerton
District Code	D0253	D0443	D0231
County	Lyon	Ford	Johnson
Enrollment	4,928	5,947	3,782
Constraints			
Economically Disadvantaged Students	56.3%	68.9%	21.5%
English Language Learners	25.1%	40.1%	0.9%
Students with Disabilities	11.5%	13.2%	12.2%
Inputs			
Core Spending (per student)	\$6,999	\$7,703	\$5,565
Outputs			
Reading and Math Proficiency Rate	65.8%	57.2%	89.0%
Reading (grades 3-8)	70.5%	60.0%	88.9%
Reading (high school)	65.4%	56.8%	87.6%
Math (grades 3-8)	67.1%	61.1%	92.0%
Math (high school)	48.7%	35.6%	78.7%
Reading and Math Performance Index	39.7%	32.9%	61.5%
Reading (grades 3-8)	42.7%	33.8%	59.6%
Reading (high school)	38.1%	32.5%	63.8%
Math (grades 3-8)	40.9%	35.8%	65.9%
Math (high school)	28.0%	21.9%	50.3%

* Efficient frontier district with most similar constraints as this district.

Kansas School District Efficiency Study

District: Erie-St. Paul (D0101)

Region: Southeast Kansas (Neosho County)

Why was this profile produced?

Governor Sebelius and the Ewing Marion Kauffman Foundation commissioned Standard & Poor's to study the relative efficiency of the state's school districts. A key component of the study is this two-page profile, produced for each of the state's less efficient school districts to provide them with a resource to help in their efforts to become more efficient.

What is a relative efficiency score? What does this district's score mean?

The relative efficiency score is derived by examining the relationship between three variables: **inputs** – how much the district spends per pupil; **outputs** – how well the district's students perform in reading and math; and **constraints** – how many of the district's students have special needs (i.e., economically disadvantaged backgrounds, physical or learning disabilities, or limited English proficiency), which are common factors that are outside of a district's control but can affect its spending and achievement levels.

Using linear mathematics, the district's data are then compared to all other school districts in the state to determine its relative efficiency score. Districts with the highest ratio of outputs to inputs in light of their constraints are considered to be on the efficiency frontier, and receive relative efficiency scores of 100%. Accordingly, they are referred to as **efficient frontier** districts. This district's score means that it is **79.88%** as efficient as the state's most efficient districts, taking into account its particular combination of inputs, outputs, and constraints.

This District's **Relative Efficiency Score** = **79.88%**

How could this district improve its efficiency score? As noted above, this district has produced less than 100% of the outputs that might have been expected for its level of inputs and constraints, based on the performance of other districts. Had the district been able to increase its outputs to the target values shown in the accompanying table, while maintaining its current level of inputs, it would have reached the **efficient frontier**.

Output Improvement Targets

Outputs	Actual Value	Target Value*
Proficiency Rate	79.5%	99.6%
Performance Index	49.9%	63.5%

*Had this district achieved the target values, it would have received a 100% relative efficiency score.

Which data are included in the calculation of the district's efficiency score?

Inputs

Core Spending
 (\$ per student spent on co

(\$ per student spent on core day-to-day operations, adjusted for local differences in purchasing power)

<u>Constraints</u> (factors outside of the district's control)

- Enrollment of Economically Disadvantaged Students
- Enrollment of English Language Learners
- Enrollment of Students with Disabilities

- Reading and Math Proficiency Rate (percent of reading and math tests scoring at the "proficient" standard or higher)
- Reading and Math Performance Index (an index that goes beyond measuring proficiency by awarding points for all tests that score above the lowest level – "basic", "proficient", "advanced", and "exemplary" – with higher scores awarded more points than lower scores)

Kansas School District Efficiency Study

District: Erie-St. Paul (D0101)

Region: Southeast Kansas (Neosho County)

Which Kansas districts are the most efficient?

A total of 21 districts across the state have been identified as **efficient frontier** districts (achieving relative efficiency scores of 100%); these are listed alphabetically in the following table. One (or more) of these districts may serve as the source of promising practices that might be replicated in order to improve this district's performance.

District	County	District	<u>County</u>	District	County
Arkansas City	Cowley	Dodge City	Ford	Lyons	Rice
Ashland	Clark	Gardner-Edgerton	Johnson	Newton	Harvey
Baldwin City	Douglas	Great Bend	Barton	Osawatomie	Miami
Brown County	Brown	Halstead	Harvey	Rolla	Morton
Burlingame	Osage	Kismet-Plains	Seward	Shawnee Mission	Johnson
Deerfield	Kearny	Lansing	Leavenworth	Waconda	Mitchell
DeSoto	Johnson	Leoti	Wichita	West Elk	Elk

How does this district compare to the state's most efficient districts?

The following table compares Erie-St. Paul with two of the state's **efficient frontier** districts using two different criteria. The first comparison is made to the efficient frontier district with the most similar demographic constraints to this district. The second comparison is made to a similarly-sized efficient frontier district that spends no more than this district and produces the highest overall student performance.

Indicator	This District	Most Similar Frontier District*	Best-Performing Frontier District**
District Name	Erie-St. Paul	Osawatomie	Baldwin City
District Code	D0101	D0367	D0348
County	Neosho	Miami	Douglas
Enrollment	862	1,235	1,407
Constraints			
Economically Disadvantaged Students	42.6%	50.8%	15.2%
English Language Learners	0.2%	0.0%	0.1%
Students with Disabilities	11.2%	15.3%	13.7%
Inputs			
Core Spending (per student)	\$9,575	\$6,193	\$6,490
Outputs			
Reading and Math Proficiency Rate	79.5%	75.5%	88.7%
Reading (grades 3-8)	83.9%	78.5%	94.3%
Reading (high school)	78.4%	78.4%	72.2%
Math (grades 3-8)	81.5%	81.4%	94.3%
Math (high school)	62.8%	39.7%	66.1%
Reading and Math Performance Index	49.9%	45.7%	64.0%
Reading (grades 3-8)	52.1%	48.0%	67.4%
Reading (high school)	51.5%	43.0%	44.6%
Math (grades 3-8)	51.4%	50.1%	74.1%
Math (high school)	37.3%	22.0%	40.1%

* Efficient frontier district with most similar constraints as this district.

Kansas School District Efficiency Study

District: Eudora (D0491)

Region: Northeast Kansas (Douglas County)

Why was this profile produced?

Governor Sebelius and the Ewing Marion Kauffman Foundation commissioned Standard & Poor's to study the relative efficiency of the state's school districts. A key component of the study is this two-page profile, produced for each of the state's less efficient school districts to provide them with a resource to help in their efforts to become more efficient.

What is a relative efficiency score? What does this district's score mean?

The relative efficiency score is derived by examining the relationship between three variables: **inputs** – how much the district spends per pupil; **outputs** – how well the district's students perform in reading and math; and **constraints** – how many of the district's students have special needs (i.e., economically disadvantaged backgrounds, physical or learning disabilities, or limited English proficiency), which are common factors that are outside of a district's control but can affect its spending and achievement levels.

Using linear mathematics, the district's data are then compared to all other school districts in the state to determine its relative efficiency score. Districts with the highest ratio of outputs to inputs in light of their constraints are considered to be on the efficiency frontier, and receive relative efficiency scores of 100%. Accordingly, they are referred to as **efficient frontier** districts. This district's score means that it is **88.78%** as efficient as the state's most efficient districts, taking into account its particular combination of inputs, outputs, and constraints.

This District's **Relative Efficiency Score** = **88.78%**

How could this district improve its efficiency score? As noted above, this district has produced less than 100% of the outputs that might have been expected for its level of inputs and constraints, based on the performance of other districts. Had the district been able to increase its outputs to the target values shown in the accompanying table, while maintaining its current level of inputs, it would have reached the **efficient frontier**.

Output Improvement Targets

Outputs	Actual Value	Target Value*
Proficiency Rate	83.0%	93.5%
Performance Index	53.9%	64.0%

*Had this district achieved the target values, it would have received a 100% relative efficiency score.

Which data are included in the calculation of the district's efficiency score?

Inputs

Core Spending
 (\$ per student spent on core day-to-day operations,

(5 per student spent of core day-to-day operations, adjusted for local differences in purchasing power)

Constraints (factors outside of the district's control)

- Enrollment of Economically Disadvantaged Students
- Enrollment of English Language Learners
- Enrollment of Students with Disabilities

- Reading and Math Proficiency Rate (percent of reading and math tests scoring at the "proficient" standard or higher)
- Reading and Math Performance Index (an index that goes beyond measuring proficiency by awarding points for all tests that score above the lowest level – "basic", "proficient", "advanced", and "exemplary" – with higher scores awarded more points than lower scores)

Kansas School District Efficiency Study

District: Eudora (D0491)

Region: Northeast Kansas (Douglas County)

Which Kansas districts are the most efficient?

A total of 21 districts across the state have been identified as **efficient frontier** districts (achieving relative efficiency scores of 100%); these are listed alphabetically in the following table. One (or more) of these districts may serve as the source of promising practices that might be replicated in order to improve this district's performance.

District	County	District	<u>County</u>	District	County
Arkansas City	Cowley	Dodge City	Ford	Lyons	Rice
Ashland	Clark	Gardner-Edgerton	Johnson	Newton	Harvey
Baldwin City	Douglas	Great Bend	Barton	Osawatomie	Miami
Brown County	Brown	Halstead	Harvey	Rolla	Morton
Burlingame	Osage	Kismet-Plains	Seward	Shawnee Mission	Johnson
Deerfield	Kearny	Lansing	Leavenworth	Waconda	Mitchell
DeSoto	Johnson	Leoti	Wichita	West Elk	Elk

How does this district compare to the state's most efficient districts?

The following table compares Eudora with two of the state's **efficient frontier** districts using two different criteria. The first comparison is made to the efficient frontier district with the most similar demographic constraints to this district. The second comparison is made to a similarly-sized efficient frontier district that spends no more than this district and produces the highest overall student performance. In this case, the comparison district under both criteria is the same.

Indicator	This District	Most Similar Frontier District*	Best-Performing Frontier District**
District Name	Eudora	Gardner- Edgerton	Gardner-Edgerton
District Code	D0491	D0231	D0231
County	Douglas	Johnson	Johnson
Enrollment	1,321	3,782	3,782
Constraints			
Economically Disadvantaged Students	24.8%	21.5%	21.5%
English Language Learners	0.5%	0.9%	0.9%
Students with Disabilities	12.1%	12.2%	12.2%
Inputs			
Core Spending (per student)	\$6,478	\$5,565	\$5,565
Outputs			
Reading and Math Proficiency Rate	83.0%	89.0%	89.0%
Reading (grades 3-8)	83.9%	88.9%	88.9%
Reading (high school)	81.3%	87.6%	87.6%
Math (grades 3-8)	83.9%	92.0%	92.0%
Math (high school)	80.9%	78.7%	78.7%
Reading and Math Performance Index	53.9%	61.5%	61.5%
Reading (grades 3-8)	54.3%	59.6%	59.6%
Reading (high school)	53.8%	63.8%	63.8%
Math (grades 3-8)	54.2%	65.9%	65.9%
Math (high school)	53.3%	50.3%	50.3%

* Efficient frontier district with most similar constraints as this district.

Kansas School District Efficiency Study

District: Eureka (D0389)

Region: Southeast Kansas (Greenwood County)

Why was this profile produced?

Governor Sebelius and the Ewing Marion Kauffman Foundation commissioned Standard & Poor's to study the relative efficiency of the state's school districts. A key component of the study is this two-page profile, produced for each of the state's less efficient school districts to provide them with a resource to help in their efforts to become more efficient.

What is a relative efficiency score? What does this district's score mean?

The relative efficiency score is derived by examining the relationship between three variables: **inputs** – how much the district spends per pupil; **outputs** – how well the district's students perform in reading and math; and **constraints** – how many of the district's students have special needs (i.e., economically disadvantaged backgrounds, physical or learning disabilities, or limited English proficiency), which are common factors that are outside of a district's control but can affect its spending and achievement levels.

Using linear mathematics, the district's data are then compared to all other school districts in the state to determine its relative efficiency score. Districts with the highest ratio of outputs to inputs in light of their constraints are considered to be on the efficiency frontier, and receive relative efficiency scores of 100%. Accordingly, they are referred to as **efficient frontier** districts. This district's score means that it is **79.10%** as efficient as the state's most efficient districts, taking into account its particular combination of inputs, outputs, and constraints.

This District's **Relative Efficiency Score** = **79.10%**

How could this district improve its efficiency score? As noted above, this district has produced less than 100% of the outputs that might have been expected for its level of inputs and constraints, based on the performance of other districts. Had the district been able to increase its outputs to the target values shown in the accompanying table, while maintaining its current level of inputs, it would have reached the **efficient frontier**.

Output Improvement Targets

Outputs	Actual Value	Target Value*
Proficiency Rate	73.9%	93.5%
Performance Index	44.8%	60.5%

*Had this district achieved the target values, it would have received a 100% relative efficiency score.

Which data are included in the calculation of the district's efficiency score?

Inputs

• Core Spending (\$ per student spent on core day-to-day operations,

adjusted for local differences in purchasing power)

Constraints (factors outside of the district's control)

- Enrollment of Economically Disadvantaged Students
- Enrollment of English Language Learners
- Enrollment of Students with Disabilities

- **Reading and Math Proficiency Rate** (percent of reading and math tests scoring at the "proficient" standard or higher)
- Reading and Math Performance Index

 (an index that goes beyond measuring proficiency by awarding points for all tests that score above the lowest level "basic",
 "proficient", "advanced", and "exemplary" with higher scores awarded more points than lower scores)

Kansas School District Efficiency Study

District: Eureka (D0389)

Region: Southeast Kansas (Greenwood County)

Which Kansas districts are the most efficient?

A total of 21 districts across the state have been identified as **efficient frontier** districts (achieving relative efficiency scores of 100%); these are listed alphabetically in the following table. One (or more) of these districts may serve as the source of promising practices that might be replicated in order to improve this district's performance.

District	County	District	<u>County</u>	District	County
Arkansas City	Cowley	Dodge City	Ford	Lyons	Rice
Ashland	Clark	Gardner-Edgerton	Johnson	Newton	Harvey
Baldwin City	Douglas	Great Bend	Barton	Osawatomie	Miami
Brown County	Brown	Halstead	Harvey	Rolla	Morton
Burlingame	Osage	Kismet-Plains	Seward	Shawnee Mission	Johnson
Deerfield	Kearny	Lansing	Leavenworth	Waconda	Mitchell
DeSoto	Johnson	Leoti	Wichita	West Elk	Elk

How does this district compare to the state's most efficient districts?

The following table compares Eureka with two of the state's **efficient frontier** districts using two different criteria. The first comparison is made to the efficient frontier district with the most similar demographic constraints to this district. The second comparison is made to a similarly-sized efficient frontier district that spends no more than this district and produces the highest overall student performance.

Indicator	This District	Most Similar Frontier District*	Best-Performing Frontier District**
District Name	Eureka	Osawatomie	Baldwin City
District Code	D0389	D0367	D0348
County	Greenwood	Miami	Douglas
Enrollment	680	1,235	1,407
Constraints			
Economically Disadvantaged Students	41.6%	50.8%	15.2%
English Language Learners	0.2%	0.0%	0.1%
Students with Disabilities	16.2%	15.3%	13.7%
Inputs			
Core Spending (per student)	\$8,495	\$6,193	\$6,490
Outputs		•	
Reading and Math Proficiency Rate	73.9%	75.5%	88.7%
Reading (grades 3-8)	82.1%	78.5%	94.3%
Reading (high school)	76.6%	78.4%	72.2%
Math (grades 3-8)	75.3%	81.4%	94.3%
Math (high school)	42.1%	39.7%	66.1%
Reading and Math Performance Index	44.8%	45.7%	64.0%
Reading (grades 3-8)	49.3%	48.0%	67.4%
Reading (high school)	44.2%	43.0%	44.6%
Math (grades 3-8)	45.9%	50.1%	74.1%
Math (high school)	28.0%	22.0%	40.1%

* Efficient frontier district with most similar constraints as this district.

Kansas School District Efficiency Study

District: Fairfield (D0310)

Region: South Central Kansas (Reno County)

Why was this profile produced?

Governor Sebelius and the Ewing Marion Kauffman Foundation commissioned Standard & Poor's to study the relative efficiency of the state's school districts. A key component of the study is this two-page profile, produced for each of the state's less efficient school districts to provide them with a resource to help in their efforts to become more efficient.

What is a relative efficiency score? What does this district's score mean?

The relative efficiency score is derived by examining the relationship between three variables: **inputs** – how much the district spends per pupil; **outputs** – how well the district's students perform in reading and math; and **constraints** – how many of the district's students have special needs (i.e., economically disadvantaged backgrounds, physical or learning disabilities, or limited English proficiency), which are common factors that are outside of a district's control but can affect its spending and achievement levels.

Using linear mathematics, the district's data are then compared to all other school districts in the state to determine its relative efficiency score. Districts with the highest ratio of outputs to inputs in light of their constraints are considered to be on the efficiency frontier, and receive relative efficiency scores of 100%. Accordingly, they are referred to as **efficient frontier** districts. This district's score means that it is **78.73%** as efficient as the state's most efficient districts, taking into account its particular combination of inputs, outputs, and constraints.

This District's **Relative Efficiency Score** = 78.73%

How could this district improve its efficiency score? As noted above, this district has produced less than 100% of the outputs that might have been expected for its level of inputs and constraints, based on the performance of other districts. Had the district been able to increase its outputs to the target values shown in the accompanying table, while maintaining its current level of inputs, it would have reached the **efficient frontier**.

Output Improvement Targets

Outputs	Actual Value	Target Value*
Proficiency Rate	67.1%	85.2%
Performance Index	37.4%	56.2%

*Had this district achieved the target values, it would have received a 100% relative efficiency score.

Which data are included in the calculation of the district's efficiency score?

<u>Inputs</u>

Core Spending

 (\$ per student spent on core

(\$ per student spent on core day-to-day operations, adjusted for local differences in purchasing power)

Constraints (factors outside of the district's control)

- Enrollment of Economically Disadvantaged Students
- Enrollment of English Language Learners
- Enrollment of Students with Disabilities

- Reading and Math Proficiency Rate (percent of reading and math tests scoring at the "proficient" standard or higher)
- Reading and Math Performance Index (an index that goes beyond measuring proficiency by awarding points for all tests that score above the lowest level – "basic", "proficient", "advanced", and "exemplary" – with higher scores awarded more points than lower scores)

Kansas School District Efficiency Study

District: Fairfield (D0310)

Region: South Central Kansas (Reno County)

Which Kansas districts are the most efficient?

A total of 21 districts across the state have been identified as **efficient frontier** districts (achieving relative efficiency scores of 100%); these are listed alphabetically in the following table. One (or more) of these districts may serve as the source of promising practices that might be replicated in order to improve this district's performance.

District	<u>County</u>	District	<u>County</u>	District	County
Arkansas City	Cowley	Dodge City	Ford	Lyons	Rice
Ashland	Clark	Gardner-Edgerton	Johnson	Newton	Harvey
Baldwin City	Douglas	Great Bend	Barton	Osawatomie	Miami
Brown County	Brown	Halstead	Harvey	Rolla	Morton
Burlingame	Osage	Kismet-Plains	Seward	Shawnee Mission	Johnson
Deerfield	Kearny	Lansing	Leavenworth	Waconda	Mitchell
DeSoto	Johnson	Leoti	Wichita	West Elk	Elk

How does this district compare to the state's most efficient districts?

The following table compares Fairfield with two of the state's **efficient frontier** districts using two different criteria. The first comparison is made to the efficient frontier district with the most similar demographic constraints to this district. The second comparison is made to a similarly-sized efficient frontier district that spends no more than this district and produces the highest overall student performance.

	This	Most Similar Frontier	Best-Performing Frontier
Indicator	District	District*	District**
District Name	Fairfield	Halstead	Waconda
District Code	D0310	D0440	D0272
County	Reno	Harvey	Mitchell
Enrollment	400	735	365
Constraints			
Economically Disadvantaged Students	54.4%	34.7%	44.3%
English Language Learners	0.0%	0.0%	0.0%
Students with Disabilities	16.2%	18.7%	12.9%
Inputs			
Core Spending (per student)	\$9,111	\$6,792	\$9,480
Outputs			
Reading and Math Proficiency Rate	67.1%	83.9%	94.5%
Reading (grades 3-8)	69.4%	87.0%	96.9%
Reading (high school)	65.3%	83.8%	88.6%
Math (grades 3-8)	63.8%	86.3%	96.6%
Math (high school)	76.2%	64.0%	92.0%
Reading and Math Performance Index	37.4%	55.8%	70.2%
Reading (grades 3-8)	38.0%	56.7%	70.4%
Reading (high school)	38.5%	55.3%	61.8%
Math (grades 3-8)	35.2%	59.6%	77.0%
Math (high school)	45.3%	41.1%	64.0%

* Efficient frontier district with most similar constraints as this district.

Kansas School District Efficiency Study

District: Flinthills (D0492)

Region: South Central Kansas (Butler County)

Why was this profile produced?

Governor Sebelius and the Ewing Marion Kauffman Foundation commissioned Standard & Poor's to study the relative efficiency of the state's school districts. A key component of the study is this two-page profile, produced for each of the state's less efficient school districts to provide them with a resource to help in their efforts to become more efficient.

What is a relative efficiency score? What does this district's score mean?

The relative efficiency score is derived by examining the relationship between three variables: **inputs** – how much the district spends per pupil; **outputs** – how well the district's students perform in reading and math; and **constraints** – how many of the district's students have special needs (i.e., economically disadvantaged backgrounds, physical or learning disabilities, or limited English proficiency), which are common factors that are outside of a district's control but can affect its spending and achievement levels.

Using linear mathematics, the district's data are then compared to all other school districts in the state to determine its relative efficiency score. Districts with the highest ratio of outputs to inputs in light of their constraints are considered to be on the efficiency frontier, and receive relative efficiency scores of 100%. Accordingly, they are referred to as **efficient frontier** districts. This district's score means that it is **82.01%** as efficient as the state's most efficient districts, taking into account its particular combination of inputs, outputs, and constraints.

This District's **Relative Efficiency Score** = 82.01%

How could this district improve its efficiency score? As noted above, this district has produced less than 100% of the outputs that might have been expected for its level of inputs and constraints, based on the performance of other districts. Had the district been able to increase its outputs to the target values shown in the accompanying table, while maintaining its current level of inputs, it would have reached the **efficient frontier**.

Output Improvement Targets

Outputs	Actual Value	Target Value*
Proficiency Rate	81.5%	99.4%
Performance Index	53.3%	67.3%

*Had this district achieved the target values, it would have received a 100% relative efficiency score.

Which data are included in the calculation of the district's efficiency score?

Inputs

Core Spending
 (\$ per student spent on core day-to-day operations,

adjusted for local differences in purchasing power)

<u>Constraints</u> (factors outside of the district's control)

- Enrollment of Economically Disadvantaged Students
- Enrollment of English Language Learners
- Enrollment of Students with Disabilities

- Reading and Math Proficiency Rate (percent of reading and math tests scoring at the "proficient" standard or higher)
- Reading and Math Performance Index (an index that goes beyond measuring proficiency by awarding points for all tests that score above the lowest level – "basic", "proficient", "advanced", and "exemplary" – with higher scores awarded more points than lower scores)

Kansas School District Efficiency Study

District: Flinthills (D0492)

Region: South Central Kansas (Butler County)

Which Kansas districts are the most efficient?

A total of 21 districts across the state have been identified as **efficient frontier** districts (achieving relative efficiency scores of 100%); these are listed alphabetically in the following table. One (or more) of these districts may serve as the source of promising practices that might be replicated in order to improve this district's performance.

District	<u>County</u>	District	<u>County</u>	District	County
Arkansas City	Cowley	Dodge City	Ford	Lyons	Rice
Ashland	Clark	Gardner-Edgerton	Johnson	Newton	Harvey
Baldwin City	Douglas	Great Bend	Barton	Osawatomie	Miami
Brown County	Brown	Halstead	Harvey	Rolla	Morton
Burlingame	Osage	Kismet-Plains	Seward	Shawnee Mission	Johnson
Deerfield	Kearny	Lansing	Leavenworth	Waconda	Mitchell
DeSoto	Johnson	Leoti	Wichita	West Elk	Elk

How does this district compare to the state's most efficient districts?

The following table compares Flinthills with two of the state's **efficient frontier** districts using two different criteria. The first comparison is made to the efficient frontier district with the most similar demographic constraints to this district. The second comparison is made to a similarly-sized efficient frontier district that spends no more than this district and produces the highest overall student performance.

	This	Most Similar Frontier	Best-Performing Frontier
Indicator	District	District*	District**
District Name	Flinthills	Waconda	Halstead
District Code	D0492	D0272	D0440
County	Butler	Mitchell	Harvey
Enrollment	323	365	735
Constraints			
Economically Disadvantaged Students	30.2%	44.3%	34.7%
English Language Learners	0.0%	0.0%	0.0%
Students with Disabilities	8.0%	12.9%	18.7%
Inputs			
Core Spending (per student)	\$7,489	\$9,480	\$6,792
Outputs			
Reading and Math Proficiency Rate	81.5%	94.5%	83.9%
Reading (grades 3-8)	82.5%	96.9%	87.0%
Reading (high school)	94.1%	88.6%	83.8%
Math (grades 3-8)	87.4%	96.6%	86.3%
Math (high school)	60.4%	92.0%	64.0%
Reading and Math Performance Index	53.3%	70.2%	55.8%
Reading (grades 3-8)	52.4%	70.4%	56.7%
Reading (high school)	62.3%	61.8%	55.3%
Math (grades 3-8)	58.7%	77.0%	59.6%
Math (high school)	38.1%	64.0%	41.1%

* Efficient frontier district with most similar constraints as this district.

Kansas School District Efficiency Study

District: Fredonia (D0484)

Region: Southeast Kansas (Wilson County)

Why was this profile produced?

Governor Sebelius and the Ewing Marion Kauffman Foundation commissioned Standard & Poor's to study the relative efficiency of the state's school districts. A key component of the study is this two-page profile, produced for each of the state's less efficient school districts to provide them with a resource to help in their efforts to become more efficient.

What is a relative efficiency score? What does this district's score mean?

The relative efficiency score is derived by examining the relationship between three variables: **inputs** – how much the district spends per pupil; **outputs** – how well the district's students perform in reading and math; and **constraints** – how many of the district's students have special needs (i.e., economically disadvantaged backgrounds, physical or learning disabilities, or limited English proficiency), which are common factors that are outside of a district's control but can affect its spending and achievement levels.

Using linear mathematics, the district's data are then compared to all other school districts in the state to determine its relative efficiency score. Districts with the highest ratio of outputs to inputs in light of their constraints are considered to be on the efficiency frontier, and receive relative efficiency scores of 100%. Accordingly, they are referred to as **efficient frontier** districts. This district's score means that it is **79.79%** as efficient as the state's most efficient districts, taking into account its particular combination of inputs, outputs, and constraints.

This District's **Relative Efficiency Score** = **79.79%**

How could this district improve its efficiency score? As noted above, this district has produced less than 100% of the outputs that might have been expected for its level of inputs and constraints, based on the performance of other districts. Had the district been able to increase its outputs to the target values shown in the accompanying table, while maintaining its current level of inputs, it would have reached the **efficient frontier**.

Output Improvement Targets

Outputs	Actual Value	Target Value*
Proficiency Rate	68.3%	85.7%
Performance Index	40.9%	54.9%

*Had this district achieved the target values, it would have received a 100% relative efficiency score.

Which data are included in the calculation of the district's efficiency score?

Inputs

Core Spending
 (\$ per student spent on co

(\$ per student spent on core day-to-day operations, adjusted for local differences in purchasing power)

<u>Constraints</u> (factors outside of the district's control)

- Enrollment of Economically Disadvantaged Students
- Enrollment of English Language Learners
- Enrollment of Students with Disabilities

- Reading and Math Proficiency Rate (percent of reading and math tests scoring at the "proficient" standard or higher)
- Reading and Math Performance Index (an index that goes beyond measuring proficiency by awarding points for all tests that score above the lowest level – "basic", "proficient", "advanced", and "exemplary" – with higher scores awarded more points than lower scores)

Kansas School District Efficiency Study

District: Fredonia (D0484)

Region: Southeast Kansas (Wilson County)

Which Kansas districts are the most efficient?

A total of 21 districts across the state have been identified as **efficient frontier** districts (achieving relative efficiency scores of 100%); these are listed alphabetically in the following table. One (or more) of these districts may serve as the source of promising practices that might be replicated in order to improve this district's performance.

District	<u>County</u>	District	<u>County</u>	District	County
Arkansas City	Cowley	Dodge City	Ford	Lyons	Rice
Ashland	Clark	Gardner-Edgerton	Johnson	Newton	Harvey
Baldwin City	Douglas	Great Bend	Barton	Osawatomie	Miami
Brown County	Brown	Halstead	Harvey	Rolla	Morton
Burlingame	Osage	Kismet-Plains	Seward	Shawnee Mission	Johnson
Deerfield	Kearny	Lansing	Leavenworth	Waconda	Mitchell
DeSoto	Johnson	Leoti	Wichita	West Elk	Elk

How does this district compare to the state's most efficient districts?

The following table compares Fredonia with two of the state's **efficient frontier** districts using two different criteria. The first comparison is made to the efficient frontier district with the most similar demographic constraints to this district. The second comparison is made to a similarly-sized efficient frontier district that spends no more than this district and produces the highest overall student performance.

Indicator	This District	Most Similar Frontier District*	Best-Performing Frontier District**
District Name	Fredonia	Osawatomie	Baldwin City
District Code	D0484	D0367	D0348
County	Wilson	Miami	Douglas
Enrollment	778	1,235	1,407
Constraints			
Economically Disadvantaged Students	49.7%	50.8%	15.2%
English Language Learners	0.0%	0.0%	0.1%
Students with Disabilities	14.8%	15.3%	13.7%
Inputs			
Core Spending (per student)	\$8,222	\$6,193	\$6,490
Outputs		•	
Reading and Math Proficiency Rate	68.3%	75.5%	88.7%
Reading (grades 3-8)	77.4%	78.5%	94.3%
Reading (high school)	84.0%	78.4%	72.2%
Math (grades 3-8)	64.7%	81.4%	94.3%
Math (high school)	43.1%	39.7%	66.1%
Reading and Math Performance Index	40.9%	45.7%	64.0%
Reading (grades 3-8)	46.8%	48.0%	67.4%
Reading (high school)	53.1%	43.0%	44.6%
Math (grades 3-8)	37.6%	50.1%	74.1%
Math (high school)	25.1%	22.0%	40.1%

* Efficient frontier district with most similar constraints as this district.

Kansas School District Efficiency Study

District: Frontenac (D0249)

Region: Southeast Kansas (Crawford County)

Why was this profile produced?

Governor Sebelius and the Ewing Marion Kauffman Foundation commissioned Standard & Poor's to study the relative efficiency of the state's school districts. A key component of the study is this two-page profile, produced for each of the state's less efficient school districts to provide them with a resource to help in their efforts to become more efficient.

What is a relative efficiency score? What does this district's score mean?

The relative efficiency score is derived by examining the relationship between three variables: **inputs** – how much the district spends per pupil; **outputs** – how well the district's students perform in reading and math; and **constraints** – how many of the district's students have special needs (i.e., economically disadvantaged backgrounds, physical or learning disabilities, or limited English proficiency), which are common factors that are outside of a district's control but can affect its spending and achievement levels.

Using linear mathematics, the district's data are then compared to all other school districts in the state to determine its relative efficiency score. Districts with the highest ratio of outputs to inputs in light of their constraints are considered to be on the efficiency frontier, and receive relative efficiency scores of 100%. Accordingly, they are referred to as **efficient frontier** districts. This district's score means that it is **86.91%** as efficient as the state's most efficient districts, taking into account its particular combination of inputs, outputs, and constraints.

This District's **Relative Efficiency Score = 86.91%**

How could this district improve its efficiency score? As noted above, this district has produced less than 100% of the outputs that might have been expected for its level of inputs and constraints, based on the performance of other districts. Had the district been able to increase its outputs to the target values shown in the accompanying table, while maintaining its current level of inputs, it would have reached the **efficient frontier**.

Output Improvement Targets

Outputs	Actual Value	Target Value*
Proficiency Rate	79.1%	91.0%
Performance Index	49.9%	61.6%

*Had this district achieved the target values, it would have received a 100% relative efficiency score.

Which data are included in the calculation of the district's efficiency score?

Inputs

Core Spending
 (\$ per student spent on core day-to-day operations,

adjusted for local differences in purchasing power)

<u>Constraints</u> (factors outside of the district's control)

- Enrollment of Economically Disadvantaged Students
- Enrollment of English Language Learners
- Enrollment of Students with Disabilities

- Reading and Math Proficiency Rate (percent of reading and math tests scoring at the "proficient" standard or higher)
- Reading and Math Performance Index (an index that goes beyond measuring proficiency by awarding points for all tests that score above the lowest level – "basic", "proficient", "advanced", and "exemplary" – with higher scores awarded more points than lower scores)

Kansas School District Efficiency Study

District: Frontenac (D0249)

Region: Southeast Kansas (Crawford County)

Which Kansas districts are the most efficient?

A total of 21 districts across the state have been identified as **efficient frontier** districts (achieving relative efficiency scores of 100%); these are listed alphabetically in the following table. One (or more) of these districts may serve as the source of promising practices that might be replicated in order to improve this district's performance.

District	County	District	<u>County</u>	District	County
Arkansas City	Cowley	Dodge City	Ford	Lyons	Rice
Ashland	Clark	Gardner-Edgerton	Johnson	Newton	Harvey
Baldwin City	Douglas	Great Bend	Barton	Osawatomie	Miami
Brown County	Brown	Halstead	Harvey	Rolla	Morton
Burlingame	Osage	Kismet-Plains	Seward	Shawnee Mission	Johnson
Deerfield	Kearny	Lansing	Leavenworth	Waconda	Mitchell
DeSoto	Johnson	Leoti	Wichita	West Elk	Elk

How does this district compare to the state's most efficient districts?

The following table compares Frontenac with two of the state's **efficient frontier** districts using two different criteria. The first comparison is made to the efficient frontier district with the most similar demographic constraints to this district. The second comparison is made to a similarly-sized efficient frontier district that spends no more than this district and produces the highest overall student performance. In this case, the comparison district under both criteria is the same.

	This	Most Similar Frontier	Best-Performing Frontier
Indicator	District	District*	District**
District Name	Frontenac	Baldwin City	Baldwin City
District Code	D0249	D0348	D0348
County	Crawford	Douglas	Douglas
Enrollment	787	1,407	1,407
Constraints			
Economically Disadvantaged Students	32.8%	15.2%	15.2%
English Language Learners	0.0%	0.1%	0.1%
Students with Disabilities	6.4%	13.7%	13.7%
Inputs			
Core Spending (per student)	\$6,885	\$6,490	\$6,490
Outputs			
Reading and Math Proficiency Rate	79.1%	88.7%	88.7%
Reading (grades 3-8)	85.1%	94.3%	94.3%
Reading (high school)	73.8%	72.2%	72.2%
Math (grades 3-8)	79.9%	94.3%	94.3%
Math (high school)	67.8%	66.1%	66.1%
Reading and Math Performance Index	49.9%	64.0%	64.0%
Reading (grades 3-8)	55.1%	67.4%	67.4%
Reading (high school)	52.6%	44.6%	44.6%
Math (grades 3-8)	49.1%	74.1%	74.1%
Math (high school)	37.1%	40.1%	40.1%

* Efficient frontier district with most similar constraints as this district.

Kansas School District Efficiency Study

District: Ft. Larned (D0495)

Region: South Central Kansas (Pawnee County)

Why was this profile produced?

Governor Sebelius and the Ewing Marion Kauffman Foundation commissioned Standard & Poor's to study the relative efficiency of the state's school districts. A key component of the study is this two-page profile, produced for each of the state's less efficient school districts to provide them with a resource to help in their efforts to become more efficient.

What is a relative efficiency score? What does this district's score mean?

The relative efficiency score is derived by examining the relationship between three variables: **inputs** – how much the district spends per pupil; **outputs** – how well the district's students perform in reading and math; and **constraints** – how many of the district's students have special needs (i.e., economically disadvantaged backgrounds, physical or learning disabilities, or limited English proficiency), which are common factors that are outside of a district's control but can affect its spending and achievement levels.

Using linear mathematics, the district's data are then compared to all other school districts in the state to determine its relative efficiency score. Districts with the highest ratio of outputs to inputs in light of their constraints are considered to be on the efficiency frontier, and receive relative efficiency scores of 100%. Accordingly, they are referred to as **efficient frontier** districts. This district's score means that it is **81.48%** as efficient as the state's most efficient districts, taking into account its particular combination of inputs, outputs, and constraints.

This District's **Relative Efficiency Score** = 81.48%

How could this district improve its efficiency score? As noted above, this district has produced less than 100% of the outputs that might have been expected for its level of inputs and constraints, based on the performance of other districts. Had the district been able to increase its outputs to the target values shown in the accompanying table, while maintaining its current level of inputs, it would have reached the **efficient frontier**.

Output Improvement Targets

Outputs	Actual Value	Target Value*
Proficiency Rate	75.5%	92.6%
Performance Index	46.6%	59.9%

*Had this district achieved the target values, it would have received a 100% relative efficiency score.

Which data are included in the calculation of the district's efficiency score?

Inputs

Core Spending
 (\$ per student spent on con-

(\$ per student spent on core day-to-day operations, adjusted for local differences in purchasing power)

<u>Constraints</u> (factors outside of the district's control)

- Enrollment of Economically Disadvantaged Students
- Enrollment of English Language Learners
- Enrollment of Students with Disabilities

- **Reading and Math Proficiency Rate** (percent of reading and math tests scoring at the "proficient" standard or higher)
- Reading and Math Performance Index
 (an index that goes beyond measuring proficiency by awarding points for all tests that score above the lowest level – "basic",
 "proficient", "advanced", and "exemplary" – with higher scores awarded more points than lower scores)

Kansas School District Efficiency Study

District: Ft. Larned (D0495)

Region: South Central Kansas (Pawnee County)

Which Kansas districts are the most efficient?

A total of 21 districts across the state have been identified as **efficient frontier** districts (achieving relative efficiency scores of 100%); these are listed alphabetically in the following table. One (or more) of these districts may serve as the source of promising practices that might be replicated in order to improve this district's performance.

District	<u>County</u>	District	<u>County</u>	District	County
Arkansas City	Cowley	Dodge City	Ford	Lyons	Rice
Ashland	Clark	Gardner-Edgerton	Johnson	Newton	Harvey
Baldwin City	Douglas	Great Bend	Barton	Osawatomie	Miami
Brown County	Brown	Halstead	Harvey	Rolla	Morton
Burlingame	Osage	Kismet-Plains	Seward	Shawnee Mission	Johnson
Deerfield	Kearny	Lansing	Leavenworth	Waconda	Mitchell
DeSoto	Johnson	Leoti	Wichita	West Elk	Elk

How does this district compare to the state's most efficient districts?

The following table compares Ft. Larned with two of the state's **efficient frontier** districts using two different criteria. The first comparison is made to the efficient frontier district with the most similar demographic constraints to this district. The second comparison is made to a similarly-sized efficient frontier district that spends no more than this district and produces the highest overall student performance.

T W	This	Most Similar Frontier	Best-Performing Frontier
Indicator	District	District*	District**
District Name	Ft. Larned	Halstead	Baldwin City
District Code	D0495	D0440	D0348
County	Pawnee	Harvey	Douglas
Enrollment	962	735	1,407
Constraints			
Economically Disadvantaged Students	41.6%	34.7%	15.2%
English Language Learners	0.0%	0.0%	0.1%
Students with Disabilities	22.2%	18.7%	13.7%
Inputs			
Core Spending (per student)	\$9,197	\$6,792	\$6,490
Outputs			
Reading and Math Proficiency Rate	75.5%	83.9%	88.7%
Reading (grades 3-8)	85.2%	87.0%	94.3%
Reading (high school)	70.3%	83.8%	72.2%
Math (grades 3-8)	74.2%	86.3%	94.3%
Math (high school)	58.8%	64.0%	66.1%
Reading and Math Performance Index	46.6%	55.8%	64.0%
Reading (grades 3-8)	53.1%	56.7%	67.4%
Reading (high school)	39.5%	55.3%	44.6%
Math (grades 3-8)	47.4%	59.6%	74.1%
Math (high school)	37.3%	41.1%	40.1%

* Efficient frontier district with most similar constraints as this district.

Kansas School District Efficiency Study

District: Ft. Larned (D0495)

Region: South Central Kansas (Pawnee County)

Why was this profile produced?

Governor Sebelius and the Ewing Marion Kauffman Foundation commissioned Standard & Poor's to study the relative efficiency of the state's school districts. A key component of the study is this two-page profile, produced for each of the state's less efficient school districts to provide them with a resource to help in their efforts to become more efficient.

What is a relative efficiency score? What does this district's score mean?

The relative efficiency score is derived by examining the relationship between three variables: **inputs** – how much the district spends per pupil; **outputs** – how well the district's students perform in reading and math; and **constraints** – how many of the district's students have special needs (i.e., economically disadvantaged backgrounds, physical or learning disabilities, or limited English proficiency), which are common factors that are outside of a district's control but can affect its spending and achievement levels.

Using linear mathematics, the district's data are then compared to all other school districts in the state to determine its relative efficiency score. Districts with the highest ratio of outputs to inputs in light of their constraints are considered to be on the efficiency frontier, and receive relative efficiency scores of 100%. Accordingly, they are referred to as **efficient frontier** districts. This district's score means that it is **88.51%** as efficient as the state's most efficient districts, taking into account its particular combination of inputs, outputs, and constraints.

This District's **Relative Efficiency Score** = **88.51%**

How could this district improve its efficiency score? As noted above, this district has produced less than 100% of the outputs that might have been expected for its level of inputs and constraints, based on the performance of other districts. Had the district been able to increase its outputs to the target values shown in the accompanying table, while maintaining its current level of inputs, it would have reached the **efficient frontier**.

Output Improvement Targets

Outputs	Actual Value	Target Value*
Proficiency Rate	69.4%	78.4%
Performance Index	43.6%	49.3%

*Had this district achieved the target values, it would have received a 100% relative efficiency score.

Which data are included in the calculation of the district's efficiency score?

Inputs

Core Spending

 (\$ per student spent on cor

(\$ per student spent on core day-to-day operations, adjusted for local differences in purchasing power)

<u>Constraints</u> (factors outside of the district's control)

- Enrollment of Economically Disadvantaged Students
- Enrollment of English Language Learners
- Enrollment of Students with Disabilities

- Reading and Math Proficiency Rate (percent of reading and math tests scoring at the "proficient" standard or higher)
- Reading and Math Performance Index (an index that goes beyond measuring proficiency by awarding points for all tests that score above the lowest level – "basic", "proficient", "advanced", and "exemplary" – with higher scores awarded more points than lower scores)

Kansas School District Efficiency Study

District: Ft. Larned (D0495)

Region: South Central Kansas (Pawnee County)

Which Kansas districts are the most efficient?

A total of 21 districts across the state have been identified as **efficient frontier** districts (achieving relative efficiency scores of 100%); these are listed alphabetically in the following table. One (or more) of these districts may serve as the source of promising practices that might be replicated in order to improve this district's performance.

District	County	District	<u>County</u>	District	County
Arkansas City	Cowley	Dodge City	Ford	Lyons	Rice
Ashland	Clark	Gardner-Edgerton	Johnson	Newton	Harvey
Baldwin City	Douglas	Great Bend	Barton	Osawatomie	Miami
Brown County	Brown	Halstead	Harvey	Rolla	Morton
Burlingame	Osage	Kismet-Plains	Seward	Shawnee Mission	Johnson
Deerfield	Kearny	Lansing	Leavenworth	Waconda	Mitchell
DeSoto	Johnson	Leoti	Wichita	West Elk	Elk

How does this district compare to the state's most efficient districts?

The following table compares Ft. Scott with two of the state's **efficient frontier** districts using two different criteria. The first comparison is made to the efficient frontier district with the most similar demographic constraints to this district. The second comparison is made to a similarly-sized efficient frontier district that spends no more than this district and produces the highest overall student performance. In this case, the comparison district under both criteria is the same.

Indicator	This District	Most Similar Frontier District*	Best-Performing Frontier District**		
District Name	Ft. Scott	Gardner- Edgerton	Gardner-Edgerton		
District Code	D0234	D0231	D0231		
County	Bourbon	Johnson	Johnson		
Enrollment	1,994	3,782	3,782		
Constraints					
Economically Disadvantaged Students	50.6%	21.5%	21.5%		
English Language Learners	0.4%	0.9%	0.9%		
Students with Disabilities	10.3%	12.2%	12.2%		
Inputs					
Core Spending (per student)	\$6,834	\$5,565	\$5,565		
Outputs					
Reading and Math Proficiency Rate	69.4%	89.0%	89.0%		
Reading (grades 3-8)	74.8%	88.9%	88.9%		
Reading (high school)	77.1%	87.6%	87.6%		
Math (grades 3-8)	69.9%	92.0%	92.0%		
Math (high school)	46.2%	78.7%	78.7%		
Reading and Math Performance Index	43.6%	61.5%	61.5%		
Reading (grades 3-8)	46.5%	59.6%	59.6%		
Reading (high school)	44.3%	63.8%	63.8%		
Math (grades 3-8)	46.5%	65.9%	65.9%		
Math (high school) * Efficient frontier district with most similar cons	26.4%	50.3%	50.3%		

* Efficient frontier district with most similar constraints as this district.