
DATA ANALYTICS

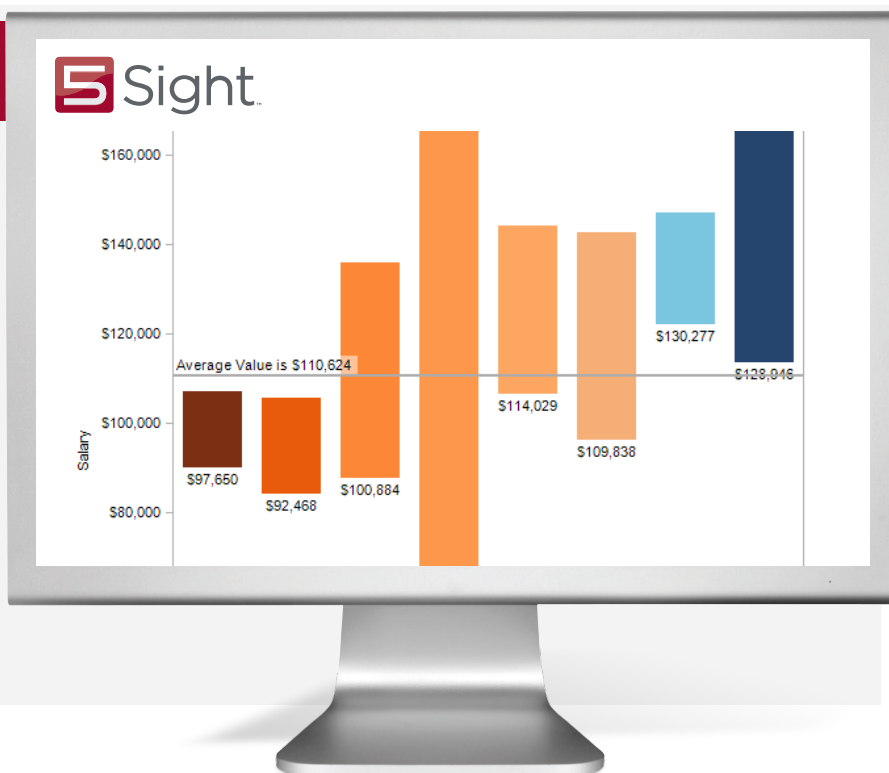
— FOR —

NEW YORK STATE SCHOOLS





***“Turning Insight
Into Action”***



5Sight is a robust Business Intelligence tool built for schools and local governments holding millions of data records in a multi-dimensional database, allowing for easy filtering and the answers needed to back up critical decisions. Pre-built data sets combine with interactive visuals to form Business Intelligence To-Go. This transformational approach allows local government leaders to spend time analyzing relevant data rather than trying to find it.

5Sight Analyze allows users to view, explore, and get behind the details of the data. Our engineering and analytics team has optimized the data to enable ultra-fast queries of very large data sets.

- *Build Custom Peer Groups*
- *Export to spreadsheet applications or dashboards*
- *Unlock the potential of the data in compliance/regulatory reports already submitted*
- *Compare to peers, view a trend, or establish Key Performance Indicators (KPIs)*

5Sight Visualize offers a unique approach to data by delivering relevant, meaningful visuals right to a desktop. Often, “seeing the story” provides a different perspective on data and allows for clearer understanding and communication.

- *Build a catalog of interactive data visualizations*
- *Customize views of charts, dashboards, and maps*
- *Filter the data and see the visuals change immediately*
- *Share visuals with colleagues and gain additional insight*



“A powerful collaboration network focused on sharing data and analytics.”

- *Increase your knowledge base with the depth and experience of colleagues in the 5Share network*
- *Fast-track your analysis on the budgetary items that will “move the needle” and the areas of highest impact and potential ROI*
- *Maximize your communication with facts and rich data visualizations*
- *Accelerate your action plan by making data-driven decisions with confidence*

The **5Share** platform combines powerful business applications with a private collaboration network. This dynamic network for sharing ideas with data and visualizations promotes discovery and innovation. Compare to your peers, view a trend, identify best practices, and establish Key Performance Indicators (KPIs).

- *Focus on your data while working through important issues in a group setting*
- *Search for solutions and communicate with colleagues*
- *Gain and distribute knowledge with purpose*

For important financial matters, local governments use **5Share** to instantly increase their field of vision and shorten decision time frames. **5Share** allows public sector entities to seek best practice methods and better deploy resources. By leveraging powerful data-mining and forecasting tools inside the **5Share** collaboration environment, local governments can increase their effectiveness and service delivery.



Revenue

Due to the “Great Recession” many sources of school district revenues are shrinking.

Our district struggles each year predicting various segments of Miscellaneous revenue.

5Sight comparability data including tuition, federal revenue and other sources can help educate a Board on how our district compares to peers.

How can the District best evaluate funding sources in this current economic climate?

By utilizing 5Sight’s historical financial data you can easily demonstrate the impact of declining state revenues on the district.

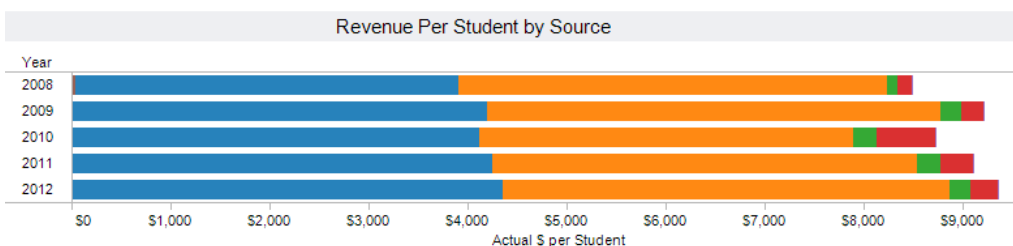
State aid and categorical funding continue to be highly unpredictable from year to year. Our Board Finance Committee often asks how we can best communicate our revenue situation to our constituents.

5Sight enables a district to better communicate changes in funding in a visual format. Compare to other districts in terms of revenue on a per student basis. View details by program or function.

REAL BUSINESS CASE

A business manager is preparing a presentation and wants to illustrate the loss of state revenue and the impact on the budget. A 5Sight visual can tell the story in a simple, understandable way.

5Sight visual of revenue by source for five years





Budgeting

In today's environment of constrained resources, school districts must find ways to optimize those resources.

How can our district improve budget accuracy?

5Sight allows for year-over-year performance comparison over the last five years.

Are we spending too much?

By utilizing annual financial reports, certified and non-certified staffing detail and enrollment, 5Sight can generate per pupil analyses to determine areas where your district is potentially not as efficient as your peers.

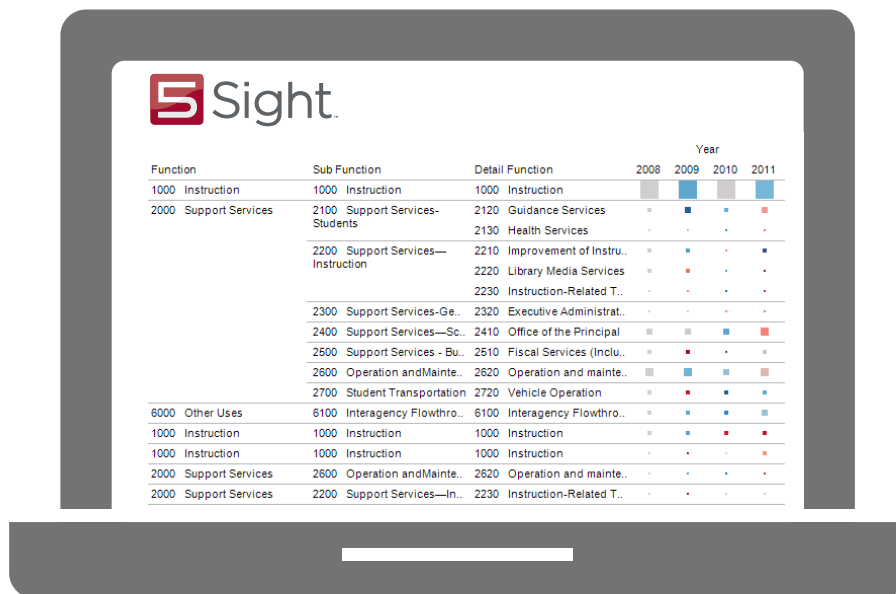
Which expenditure areas are hardest to control?

With five years of financial history, 5Sight allows you to identify which line-items are increasing the fastest and which are most frequently at or over budget.

Most of our costs are based upon collective bargaining agreements, how do we control those costs?

5Sight provides the data to compare current salaries across districts and to allow you to see the increases that have been negotiated in recent years.

5Sight visual of year over year financial performance





Negotiations

Having a significant amount of data at your fingertips puts the district in the best position to have a successful negotiation process.

How has the makeup of a specific bargaining group changed since our last negotiation?

Use 5Sight to analyze the change in experience of your staff over time and quickly identify staff approaching retirement age.

Can I analyze year-over-year total salaries and average salaries for the bargaining group?

Yes, you can determine the historical salary costs factoring in changes in FTE, retirements, and salary increases.

When hiring for a “difficult to fill” position, how do I determine a competitive salary?

Use 5Sight to retrieve specific salary ranges based on experience level for positions such as psychologists, social workers, speech therapists, etc.



5Sight visual of certified staff experience over five years.

REAL BUSINESS CASE

A district is coming off a 4 year contract and is preparing for the first session with an all new union bargaining team. A valuable piece of data at the bargaining table is knowledge of your staff's experience, how it has changed, and the insight that can provide into what the negotiating team's key issues will be.



Staffing

Approximately 80% of district expenditures are typically tied to salaries and benefits. Properly allocating these resources can have the greatest impact on students.

Does our district have the right number of _____?

A position control analysis allows your district to make a determination on whether staffing resources are properly allocated. Use 5Sight to compare your students per FTE for all positions (i.e. guidance counselors, librarians, other specialists).

How do our class sizes compare to our peers?

Use 5Sight to determine how your district compares to your selected peer group on class size.

Are our programmatic costs in line with what other districts are spending?

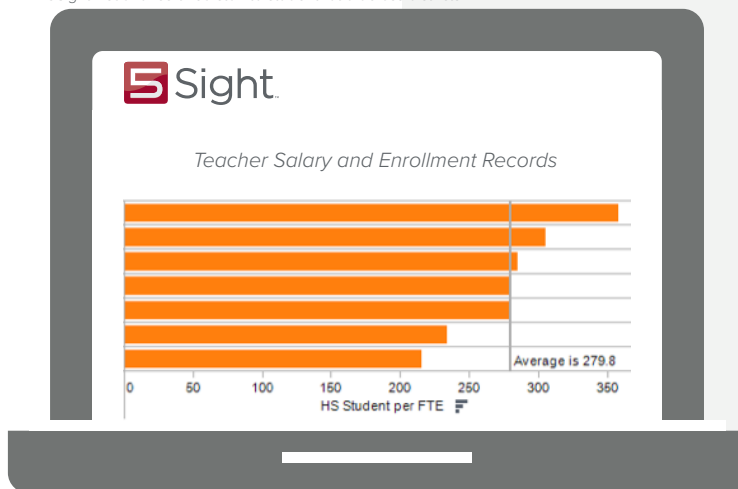
See how your own district's staffing costs (by program) have changed over the last five years and benchmark against other districts.

When hiring for any position, how do I determine a competitive salary?

Rather than survey your peers the old fashioned way, use 5Sight to identify specific salary ranges based on experience level for positions such as principals, directors or other administrators.

REAL BUSINESS CASE

5Sight visual of certified staff to student ratio across districts



A district's enrollment is declining, and the administration is looking for ways to reduce staff through attrition. Utilizing position control to find areas of inefficiency is an excellent way to target savings opportunities and reallocate resources.



Community

In the current economic climate, districts are getting more pressure from their communities to control costs as well as taxes. Keeping your constituents informed of the challenges you face is essential.



		2007	2008	2009	2010	2011	2012
SD 72	Average District Experience	11.06	8.91	8.69	9.04	9.26	9.71
	FTE Count	54.20	58.26	60.70	63.80	63.30	62.80
	Grade Level Enrollment	571.00	613.00	606.00	607.00	633.00	653.00
	Average Salary	\$69,513.22	\$68,614.14	\$67,859.45	\$69,634.11	\$75,894.49	\$75,750.49
SD 70	Average District Experience	9.74	10.42	10.99	11.59	12.01	13.04
	FTE Count	62.41	63.91	64.91	64.62	64.62	59.61
	Grade Level Enrollment	788.00	812.00	837.00	808.00	823.00	837.00
	Average Salary	\$70,603.58	\$73,000.72	\$79,024.26	\$82,479.86	\$84,481.83	\$85,149.47
SD 69	Average District Experience	7.09	5.82	6.11	6.97	7.44	7.74
	FTE Count	119.42	132.60	139.00	139.06	139.75	114.95
	Grade Level Enrollment	1,515.00	1,605.00	1,669.00	1,665.00	1,662.00	1,708.00
	Average Salary	\$63,197.84	\$61,995.08	\$62,584.75	\$66,796.94	\$68,569.31	\$70,601.71

5Sight query of BEDS data

REAL BUSINESS CASE

A district is gathering comparative data for community engagement and a potential referendum. A simple query in 5Sight allows the administration to create a comparison table of key statistics comparing the district to their peers.

Our community has high expectations for its schools, how can we communicate the challenges we face?

With 5Sight's broad historical data sets you can compile a story for your community that shows in concise visual ways financial, enrollment and staffing trends over time.

Our district is very sound financially, but our community doesn't know that.

By using comparative peer data and key performance indicators, you can use 5Sight's visuals to tell your success story.

How can we communicate our financial situation and make a case for increased community support?

By leveraging 5Sight's statewide data sets, you can create peer comparisons to tell your unique story of revenues and expenses and relate that information back to student performance.



Enrollment

How does my enrollment compare to surrounding districts and/or across my own district?

See a comparison of enrollment by district or building using measurements such as gender, race/ethnicity, or low income.

When the Board asks for an enrollment projection each year, I often wish I had more data at my fingertips.

Use 5Sight to analyze the number of live births within the district relative to kindergarten enrollment. Use this information to better forecast future kindergarten enrollment.

Special Education funding and expenditures continue to have a significant impact on our district's budgets.

Rather than surveying peers via email or phone calls, 5Sight allows me to quickly view special education enrollment compared to peer districts and analyze spending per student for various programs.

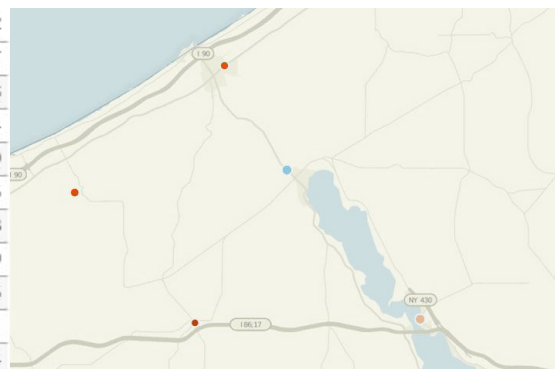
How does our district's low income count compare to the state average or other districts in my peer groups?

Low income count impacts many different areas of the budget on both the revenue and expense sides. Use 5Sight to see how your district compares and communicate a visual story to constituents.

The makeup of a district's enrollment across buildings and at various grade levels impacts many different areas of the budgeting and educational processes.

School	2007	2008	2009	2010	2011	2012
ABRAHAM LINCOLN ELEM S..	365	369	377	398	367	387
CARLYLE C RING ELEMENT..	392	431	468	454	468	466
CLINTON V BUSH ELEMENT..	264	262	261	287	296	294
GEORGE WASHINGTON MID..	552	549	515	501	526	549
JAMESTOWN HIGH SCHOOL	1,397	1,509	1,508	1,469	1,459	1,375
MILTON J FLETCHER ELEME..	441	472	450	465	475	448
PERSELL MIDDLE SCHOOL	517	520	510	510	524	519
SAMUEL G LOVE ELEMENTA..	339	346	344	329	313	315
THOMAS JEFFERSON MIDL..	413	390	448	485	475	441
District Total	4,680	4,848	4,881	4,898	4,903	4,794

5Sight visual of enrollment change by school



% Change in Total Enroll..

-25.00% 25.00%



Research

Having data at your fingertips can save significant time in completing a particular task while also providing the opportunity to research areas for improvement.

I have been asked by our Board to conduct an administrative cost study by comparing our administrative salaries and ratios to other districts.

Use 5Sight to assist with the completion of this task by quickly accessing the names, salary information and student/FTE ratios.

Anytime our district is preparing for negotiations, we spend a lot of time sending emails and calling our peer districts for comparison information. If I have access to the Forecast5 tools, can I access that information quickly?

Yes, you can use 5Sight to research information related to teacher salaries. 5Share will then allow you to collaborate with others as you seek more specific information about a particular district's compensation structure.

What if I don't know exactly what I am looking for but I want to research and identify opportunities for potential change?

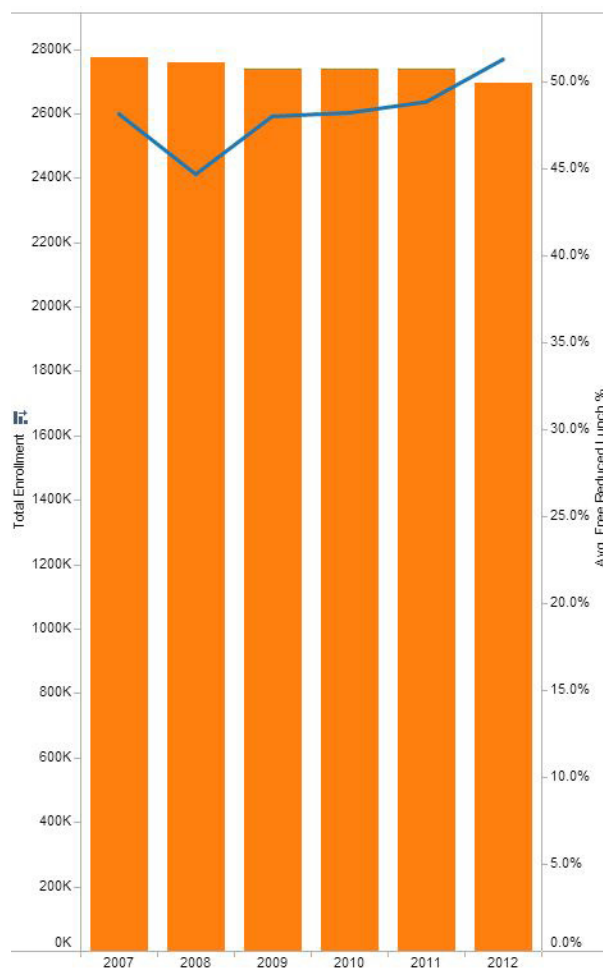
This is a tremendous benefit of having access to a significant amount of relevant data in an easy to use format. Because "we don't know what we don't know", 5Sight creates an opportunity for data discovery and identifying areas for improvement within a district's current cost structure.

Am I able to access non-licensed staff data and determine what our costs are in comparison to other districts?

5Sight allows you to quickly view comparison information for support staff positions such as custodial, food service, teacher aides, etc.

Free and Reduced Enrollment

Source: School Enrollment Data



“We are honored to have this opportunity to work with The Council and NYSASBO to serve New York State schools. In partnership with both associations, we will be able to deliver meaningful and actionable analytics to assist New York State school districts with their resource decisions. Forecast5 data technologies are providing schools with a wide field of view, new financial perspectives, and opportunities to collaborate with peers.”

Michael R. English

President/CEO, Forecast5 Analytics Inc.

“NYSASBO believes Forecast5’s analytical tools will be a tremendous asset to school districts and their business officials in developing budgets and long-range fiscal plans.”

Michael J. Borges

Executive Director, NYSASBO

“The data analytics and tools developed by Forecast5 Analytics are the most powerful and user friendly I have seen in my 40+ years in education. These tools will assist school leaders in making informed decisions when analyzing resource allocation and organizational effectiveness. Using these tools will absolutely add value to the challenging work facing all leaders today.”

Dr. Robert J. Reidy, Jr.

Executive Director, The Council



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