



Financial Forecasting in a Crisis Environment OSBA Town Hall

April 29, 2020 | 4:00 p.m.

With today's challenges brought on by COVID-19 and potential state funding cuts, the Ohio Forecast5 team will discuss things to consider as you navigate the "known unknowns" and provide financial leadership to your district during this time of uncertainty.

TODAY'S PRESENTER

- **Ernie Strawser**, Senior VP at Forecast5 Analytics
 - Before joining Forecast5, Ernie was a partner at Public Finance Resources serving over 300 of Ohio's school district. His responsibilities at PFR included the development of financial forecasting and benchmarking software for school districts. In addition to software development he also provided direct consulting services to hundred of Ohio school district.
 - Ernie also spent over 30 years in public finance as a CFO in Ohio school districts and received his B.A. in finance from Ohio University and his Master of Science from Central Michigan University.

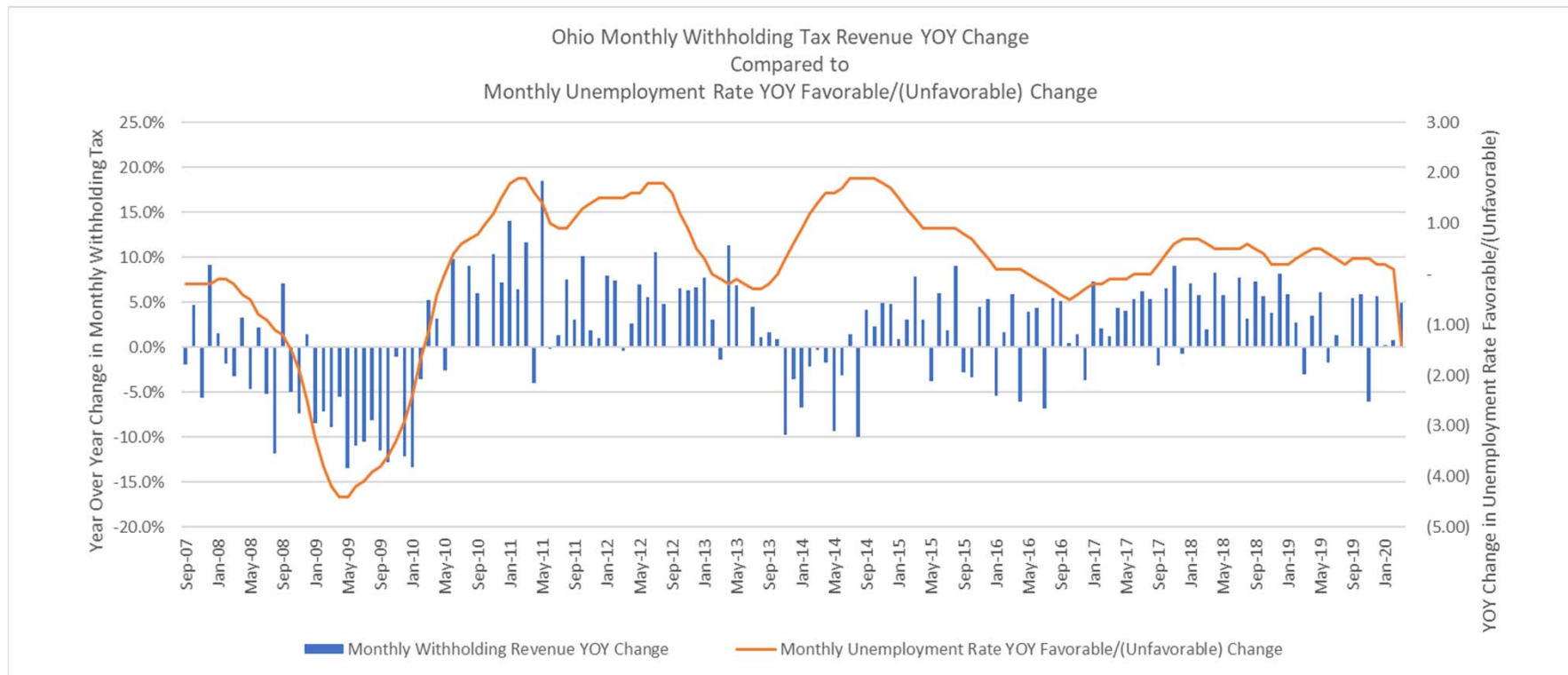
- **Examining the Known Unknowns in Your Finances**

- We are often asked how a financial forecast can be done with so much uncertainty. There are “known unknowns” in any financial projection, and in a crisis like this 2020 Coronavirus pandemic, these grow exponentially. However, there are underlying fundamentals that need to be the foundation of our financials, and in a crisis, a fundamental financial indicator is cash.
- While the debate lingers about the known unknowns of state funding, timing of property tax collections, or local income tax revenue, the district’s cash balance trend is providing insight. Cash flow fundamentals, coupled with a shorter forecasting period, will contain the exponential impact of the “known unknowns”. This interim cash trend on a shortened time period will help school leaders make the best decisions without multiplying the unknown factors.

Webinar Objectives

- Pursue Information
 - State of Ohio Financials (OBM Monthly Report)
 - Past Recessionary Impact on Withholding Taxes
 - Faster loss but hopefully not as long
 - Monitoring monthly
- Address Concept of “Known Unknowns”
 - Grows exponentially in crisis
 - › Unknown duration; unclear state response financially, unclear state response operationally
 - Resist 5x multiplier
- Interim Forecasting (A Profile)
 - Cash is KING
 - Monthly cash flow
 - Indicators of urgency
- Budget Response
 - Rightsizing A – Non-program operating
 - Rightsizing B – Program repurpose budget, reduce
 - Downsizing – Cuts to survive

State Withholding Income Taxes Over Time



The immediate post Great Recession period saw profound declines then recovery beginning in April, 2010. Note: Outside of the Great Recession period, most year-over-year withholding drops were caused by cuts in tax rates

Your Forecast5 Team will be monitoring monthly and sharing insight in our monthly CFO webinar series.

March State Key Revenue Components

REVENUE SOURCE	MONTH			
	ACTUAL MARCH	ESTIMATE MARCH	\$ VAR	% VAR
TAX RECEIPTS				
Non-Auto Sales & Use	622,516	689,100	(66,584)	-9.7%
Auto Sales & Use	128,963	130,400	(1,437)	-1.1%
Subtotal Sales & Use	751,479	819,500	(68,021)	-8.3%

Non-Auto sales tax receipts were nearly 10% below estimates

Income tax withholding was above estimate for both the month and year-to-date

MARCH PERSONAL INCOME TAX RECEIPTS BY COMPONENT (\$ in millions)						
	Actual March	Estimate March	\$ Var	Actual Mar-2020	Actual Mar-2019	\$ Var Y-Over-Y
Withholding	\$819.5	\$805.9	\$13.6	\$819.5	\$791.0	\$28.5

obm.ohio.gov – Monthly Financial Reports (released the 10th of each month)

One and Two Year Interim Forecast Focus

Simplified Financial Statement

	2020	2021	2022
Beginning Cash Balance	\$3,252,257	\$2,353,857	\$1,467,430
+ Revenue	\$17,077,819	\$16,476,184	\$16,505,012
+ Renewal Levies	\$0	\$0	\$0
+ New Levies	\$0	\$0	\$0
- Expenditures	\$17,976,219	\$17,362,611	\$17,809,037
= Revenue Surplus or Deficit	-\$898,400	-\$886,427	-\$1,304,025
Ending Cash Balance with Levies	\$2,353,857	\$1,467,430	\$163,405
Revenue Surplus or Deficit without Levies	-\$898,400	-\$886,427	-\$1,304,025
Ending Cash Balance without Levies	\$2,353,857	\$1,467,430	\$163,405

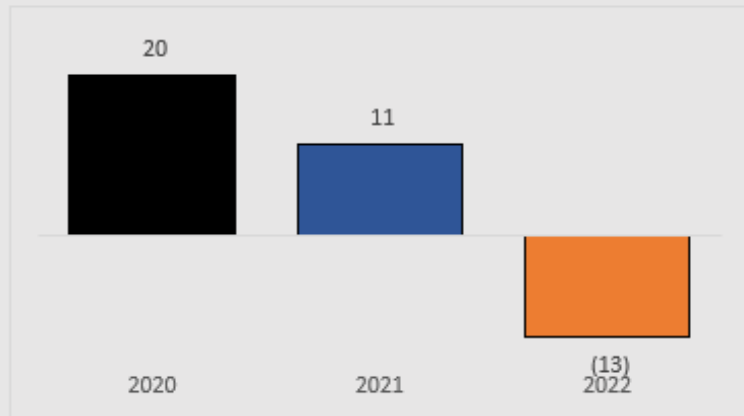
**Balances not reduced for encumbrances or reservations

Interim Forecast Results - CASH

COVID-19 Crisis -- Interim Forecast Cash Flow 5-Point Analysis

In times of crisis while standard forecasting technique provides solid underlying trend information, the urgency of the crisis causes increased scrutiny of cash reserves and also shorter analytical timelines (2 or 3 years) to reduce the exponential growth of 'known unknowns' and added uncertainty. This report is intended to focus on the cash balance reserves both at year-end and monthly to help districts be prepared and strategically plan.

Calendar Days of Cash on Hand



Note: Funds 001 and 016 Only and Assumes 365 Day Calendar Year

Does not include proposed renewal or new levies

The district is expected to have 11 calendar days of cash on hand at fiscal year-end 2021. A negative number of days indicates a negative cash balance. Any cash balance should be referenced relative to the district's operating revenue surplus or deficit. The district is expected to spend \$412,915 more than its revenue in FY 2021.

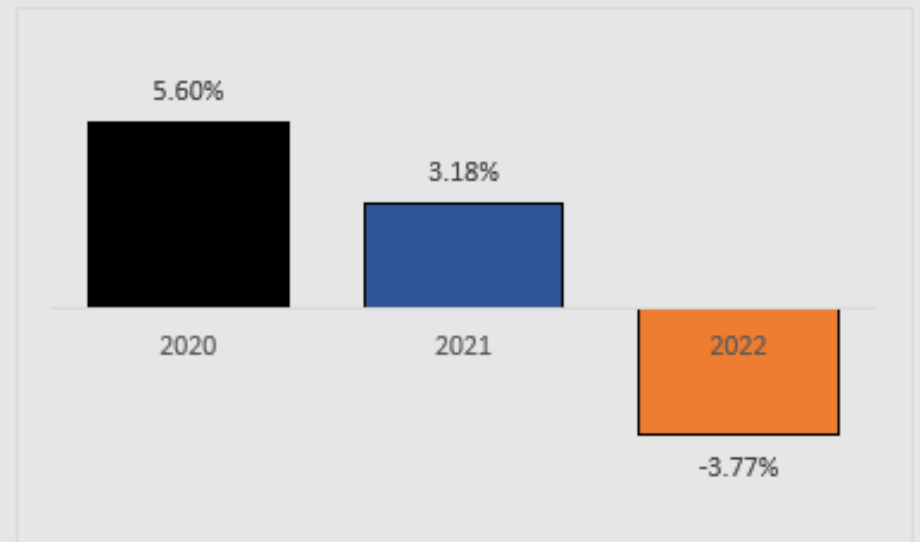
Ending Cash Balance in (\$000)

Year	2020	2021	2022
Ending Cash Balance	\$937	\$524	(\$617)

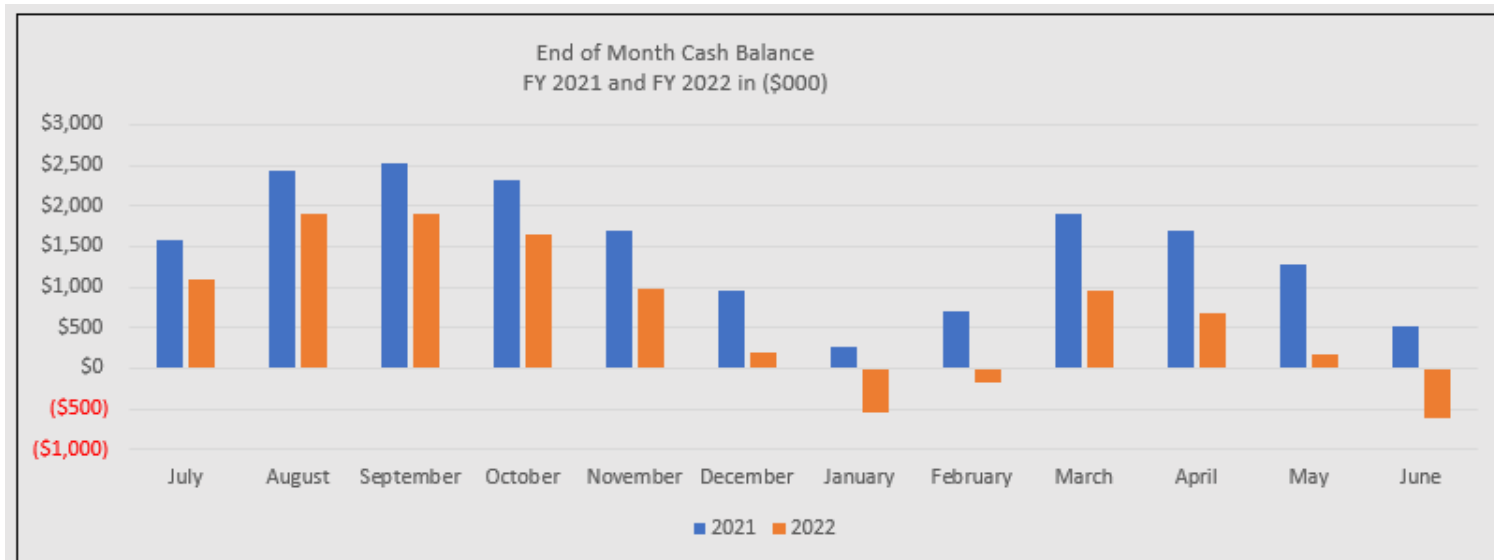
How Much Total Revenue Could One-time Cash on Hand Replace?

In times of crisis the district will consider the potential impact from short term losses, delays, or interruptions in revenue. The calculation of cash balance as a % of revenue can help the district to understand the amount of revenue change that could be buffered by one-time cash balance reserves. Naturally a negative cash balance does not provide a buffer.

Cash Balance as % of Revenue



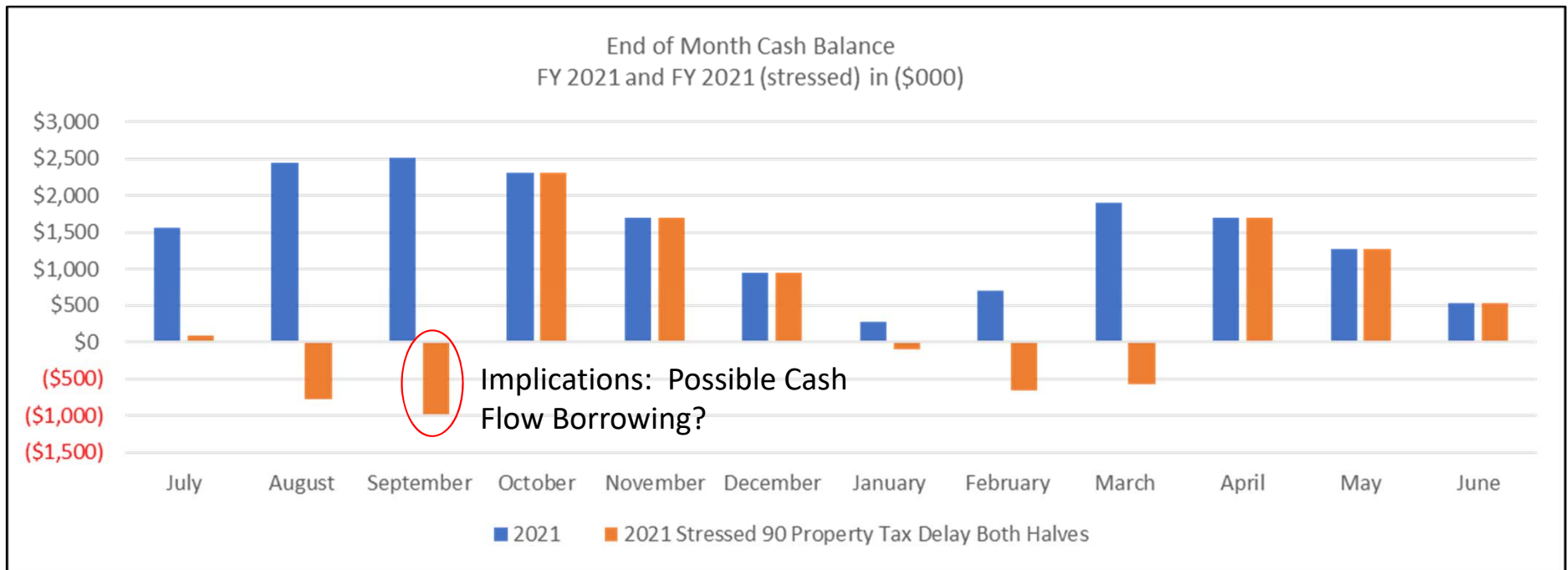
Cash Balance Sense of Urgency



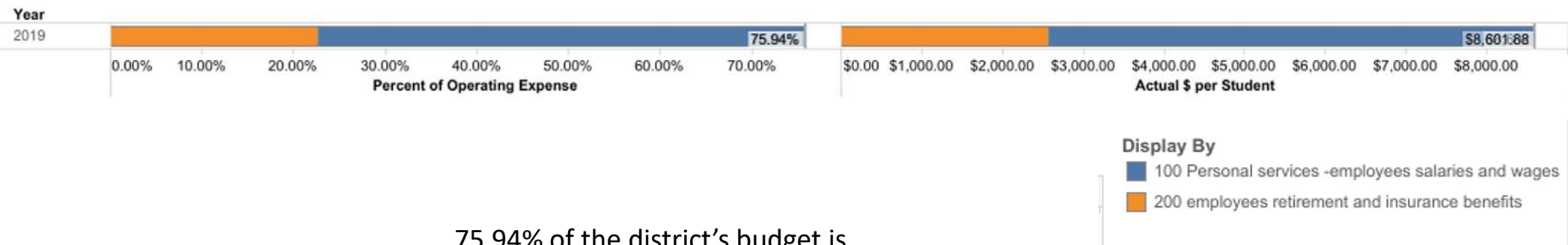
District cash balances can fluctuate significantly within a fiscal year. Districts more dependent upon local tax revenue can see the most fluctuation. Districts should be aware of their lower cash balance points to be able to assess ability to maintain cash flow through stress points caused by weak financial conditions and/or crisis.

In FY 2021 the district's lowest mid-year end-of-month cash balance is projected to be \$269,472, while the year-end balance is projected to be \$524,355. In FY 2022 the district's lowest mid-year end-of-month cash balance is projected to be -\$540,003, and the year-end balance is projected to be -\$617,107

What-if Delay Only (Without Reductions?)



Salaries & Benefits as % of Total Expense



75.94% of the district's budget is consumed by salaries and benefits. The implications on Rightsizing, Rightsizing, Downsizing are heavily skewed toward personnel.

How has the district's financial position evolved?

What can we learn about district revenues during the great recession that might inform us in the current economic uncertainty?

What impact did the revenue pattern have on our overall fiscal condition?

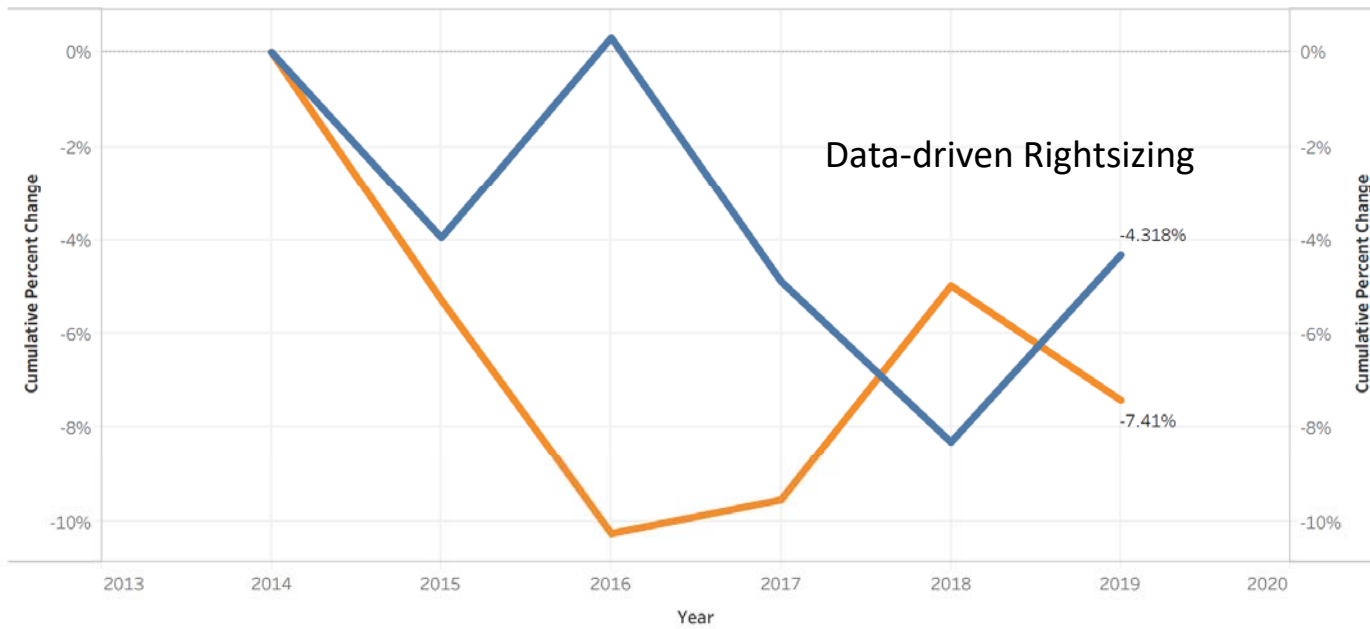
What opportunities do we have for reducing expenditure? Have our teaching staff FTEs been in line with our enrollment?

How does purchased service and supply spending compare to similar districts?

Data Notes

A Local School District Economic Profile

The graph below show the cumulative percent changes in FTE and Enrollment from 2014 to 2019.



■ % Difference in District Enrollment
■ % Difference in FTE

Powered by
FORECAST5
ANALYTICS

A Five-part custom economic profile of your district is available from :

Josh Rader
Jrader@forecast5analytics.com

In A Crisis 'Known Unknowns' Grow Exponentially

- › Maintain and focus on both a Forecast1yr and a Forecast2yr
 - Crisis driven focus on year 1 and 2 of the Forecast5yr
 - Pursue information continually
 - Model information-driven (not speculative) changes in a timely way
 - When did you know? When could you have known? When did you tell me?
- › Know your cash position both end-of-year and monthly
 - Stress test cash reserves and be prepared in advance for borrowing needs
 - Assess ability to withstand unfavorable
 - What is your sense of urgency?
- › Rightsize, Rightsize, Downsize
 - Data-driven Rightsizing
 - Cash-driven Urgency Assessed for Downsizing Needs

Next Step To Additional Resources

- ➔ You can access a full webinar recording that expands upon the topics touched upon during this OSBA Town Hall at:

<https://forecast5analytics.wistia.com/medias/g2q5ijy7hg>

- ➔ Additional COVID-19 Resources:

<https://www.forecast5analytics.com/covid-19-resources>

- ➔ Interested in learning more or obtaining your district's custom economic impact report?

Contact Josh Rader to schedule a personal one-on-one at
jrader@forecast5analytics.com



Revenue Stressors and Navigating Uncertainty to Provide Financial Leadership

April 24, 2020 | 11:30 a.m.

With today's challenges brought on by COVID-19 and potential state funding cuts, the Ohio Forecast5 team will discuss things to consider as you navigate the "known unknowns" and provide financial leadership to your district during this time of uncertainty.

TODAY'S PRESENTERS

- **Ryan Ghizzoni**, Senior Analytics Advisor at Forecast5 Analytics
 - Began his career with the Auditor of State's Office and served as a school district treasurer for the past 16 years. During his career, he had been a recipient of ten Association of School Business Officials International Meritorious Budget Awards and was the recipient of the Ohio Association of School Business Officials 2011 Outstanding Treasurer of the Year Award.
 - Ryan holds a Bachelor of Business Administration from the Youngstown State University, and is a Certified Administrator of School Finance and Operations.
- **Mike Sobul**, Senior Analytics Advisor at Forecast5 Analytics
 - Mike served as the Section Chief for Forecasting and Special Projects at the Tax Analysis Division of the Ohio Department of Taxation. In his role with the Department of Taxation, Mike was the lead revenue forecaster for the State of Ohio from the late 1980s until July 2011. Prior to joining Forecast5 he spent over seven years as the CFO/Treasurer of Granville Schools.
 - Mike received his B.A. in economics and political science from Wittenberg University and his Master of Public Policy from the University of Michigan.
- **Ernie Strawser**, Senior VP at Forecast5 Analytics
 - Before joining Forecast5, Ernie was a partner at Public Finance Resources serving over 300 of Ohio's school district. His responsibilities at PFR included the development of financial forecasting and benchmarking software for school districts. In addition to software development he also provided direct consulting services to hundred of Ohio school district.
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Introduction

Using information, not speculation, to provide the most understanding about district financials in a very dynamic operating environment.

The concept that “known unknowns” grows exponentially in a crisis can also cause traditional five-year forecasting to be a 5x multiplier of unknowns and uncertainty.

Today we will focus on the data, interim forecasting, and best practice to be prepared.

Webinar Objectives

- State of Ohio Financials (OBM Monthly Report)
 - Timely (monthly) updates from the state – obm.ohio.gov
- Past Recessionary Impact on Withholding Taxes
 - Faster loss but hopefully not as long
 - Monitoring monthly
- Address Concept of “Known Unknowns”
 - Grows exponentially in crisis
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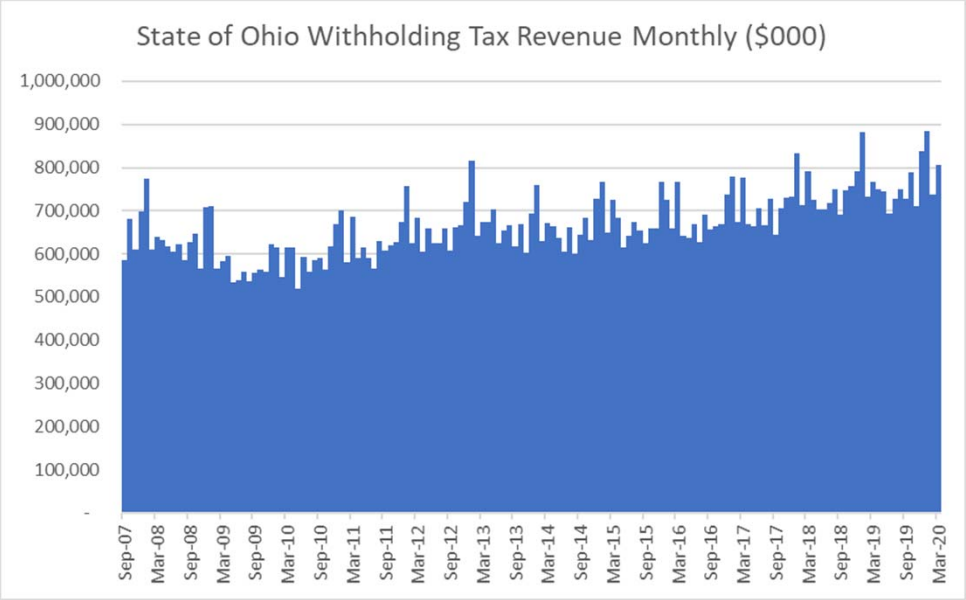
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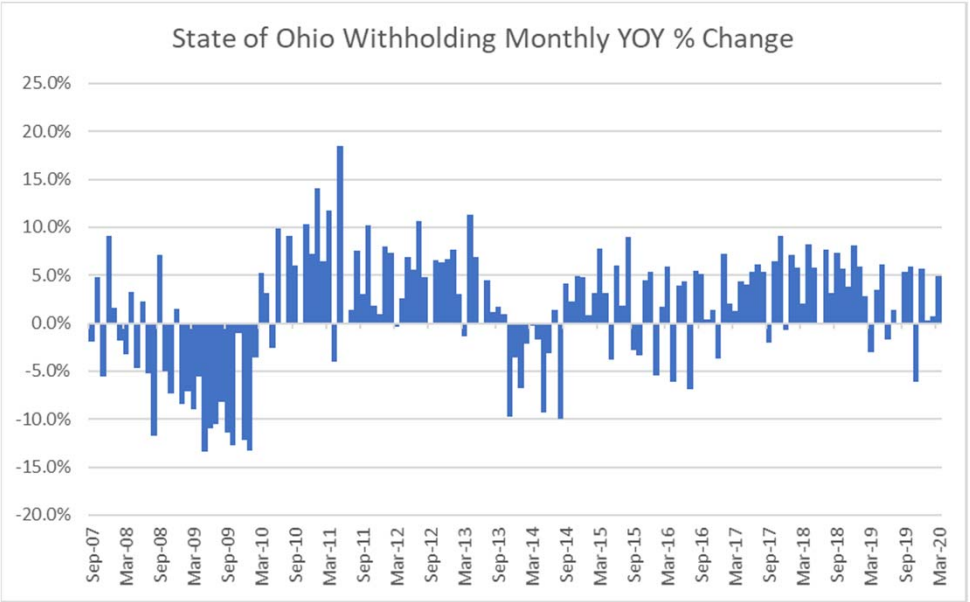
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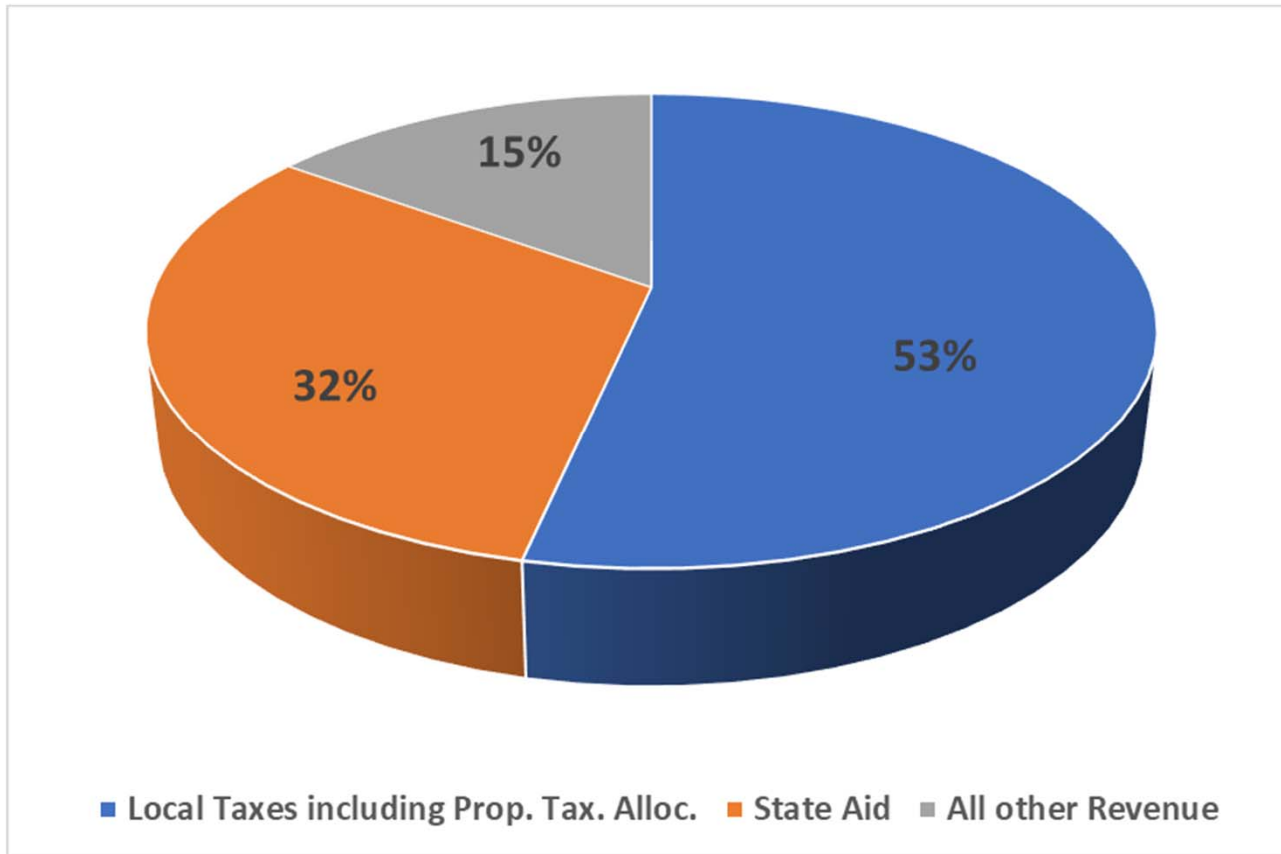
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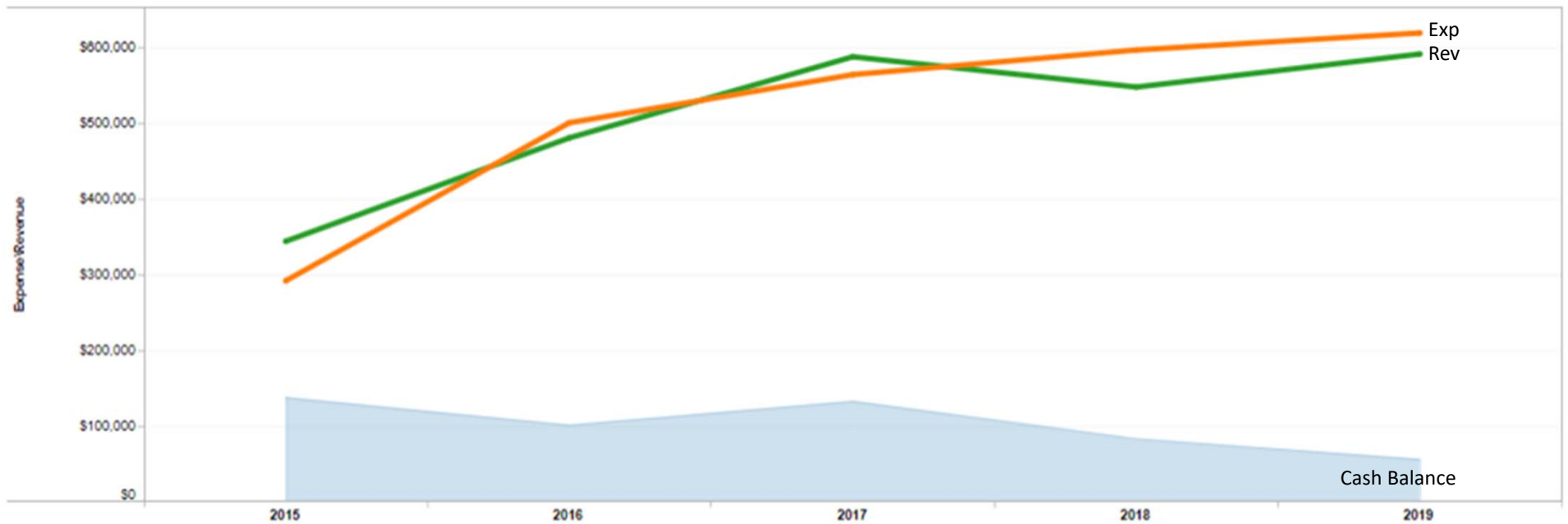
Case Study

Where does the district get their funding?

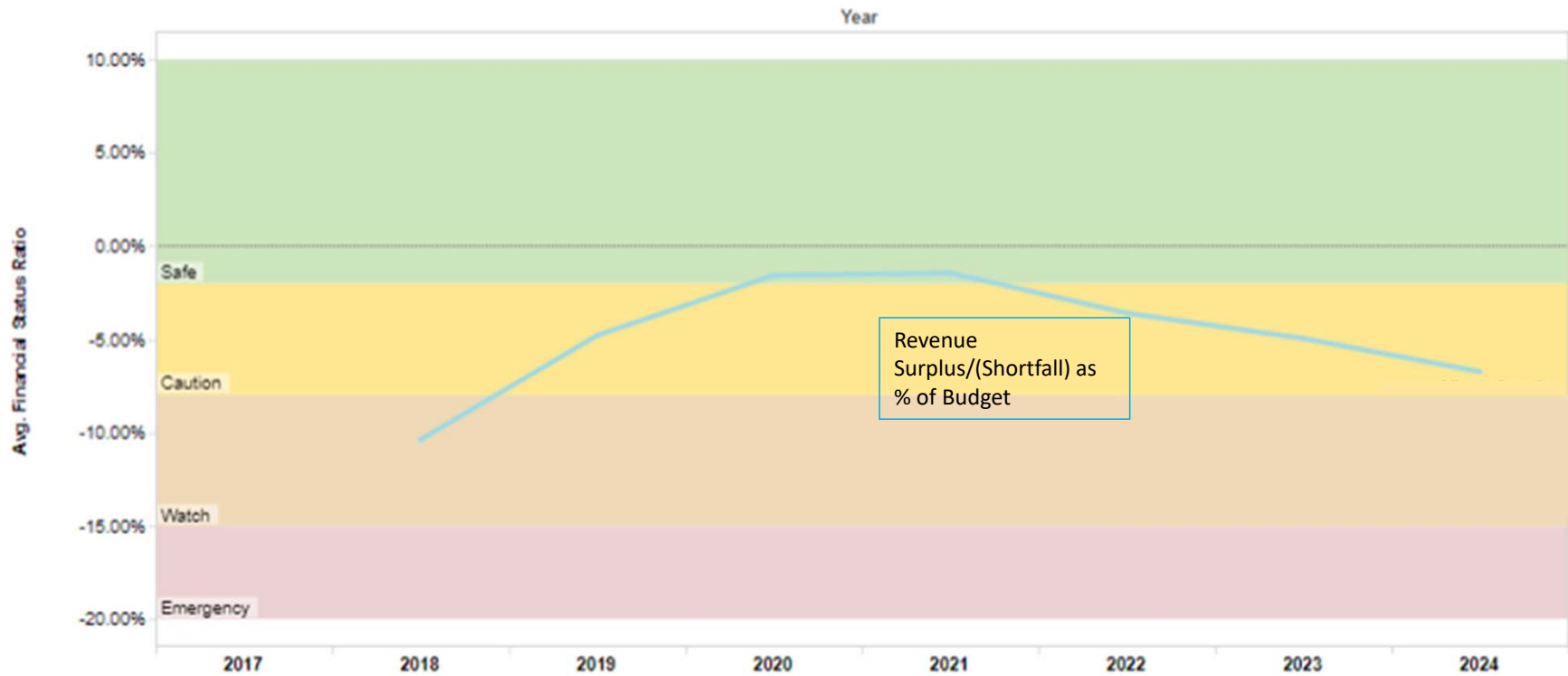


- Weak underlying financials going into COVID-19
- Expenditure growth not sustainable
- Pre COVID-19 reduction plan that met with resistance
- Spending more than they can support and running out of cash

Pre COVID-19 Declining Cash Balance



Sustainable?



Interim Period (1,2,3) Forecasting in a Crisis

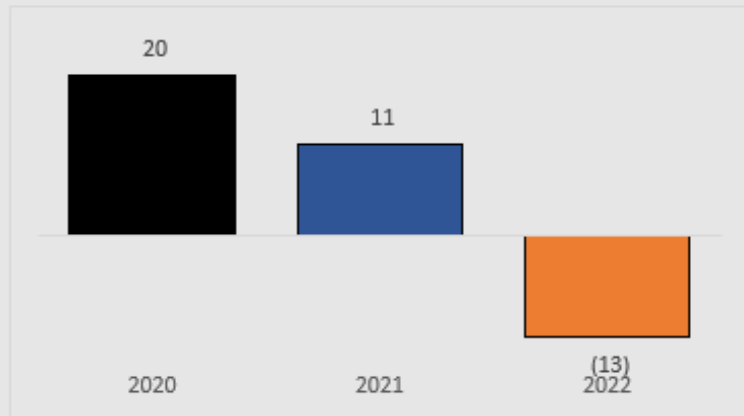
1. How is the current year going to end?
2. What is our monthly cash flow stability next year?
3. What is year 3 (2022) telling us about order of magnitude?

Interim Forecast Results - CASH

COVID-19 Crisis -- Interim Forecast Cash Flow 5-Point Analysis

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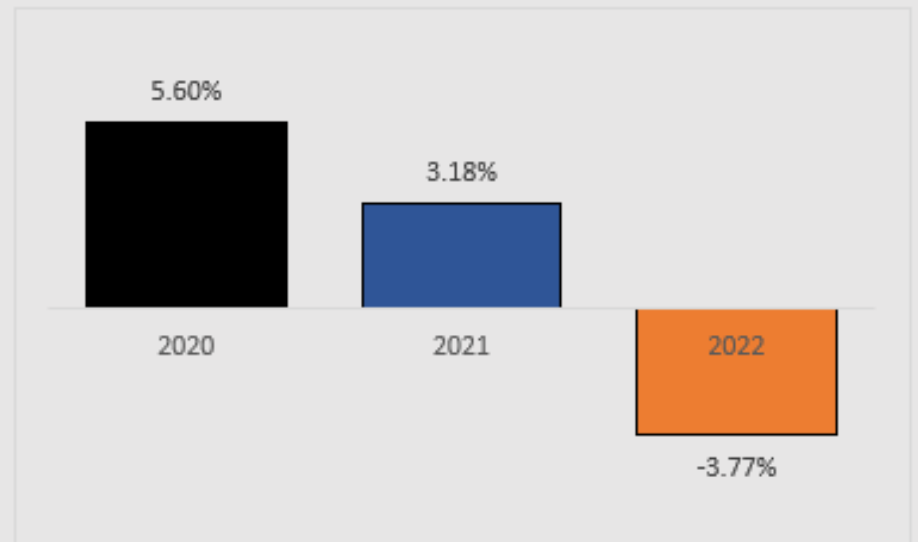
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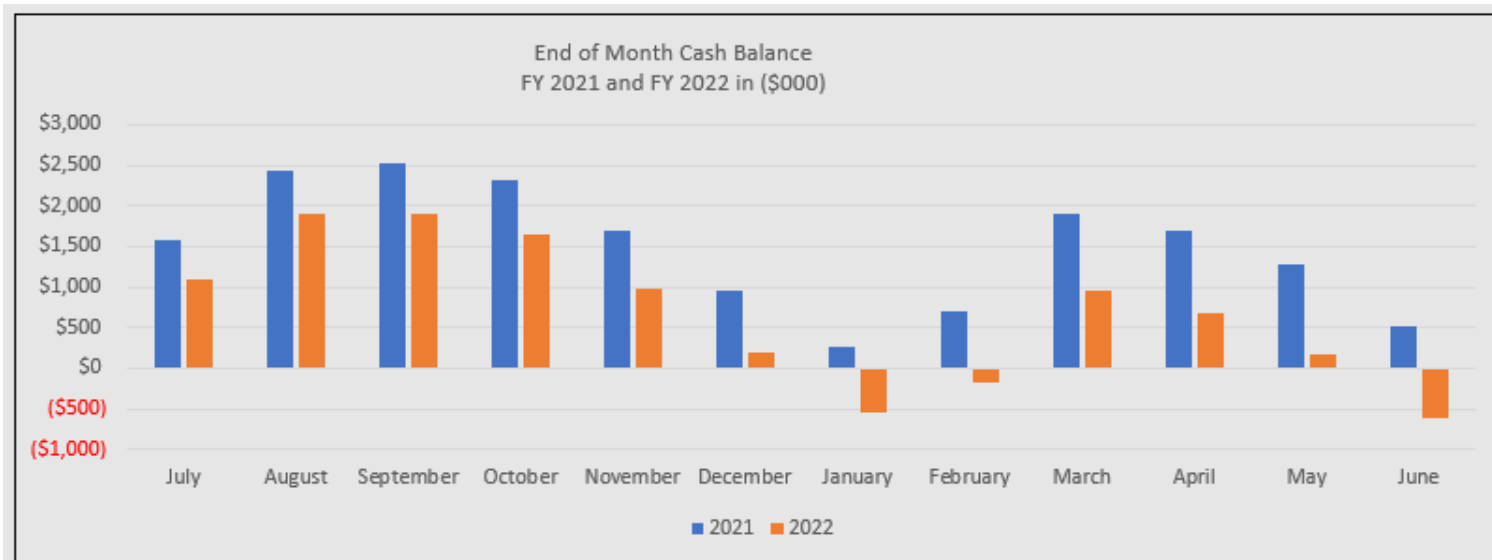
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Cash Balance as % of Revenue



Cash Balance Sense of Urgency



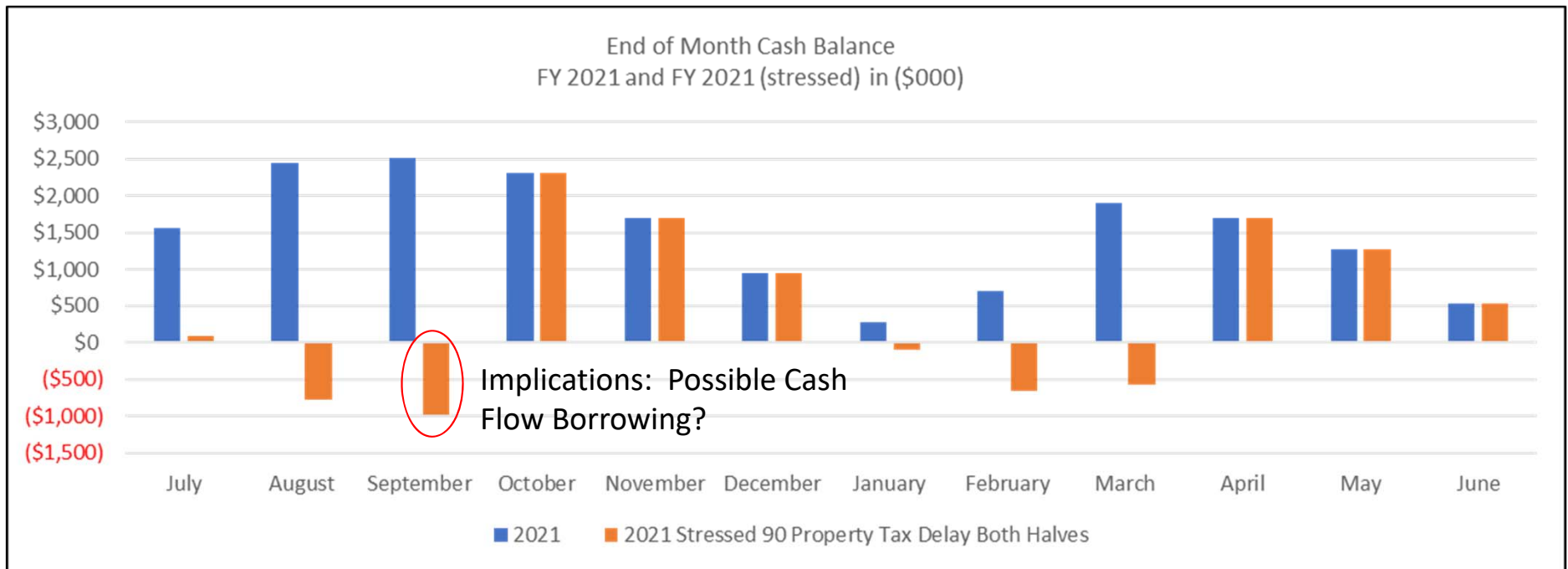
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Clear Financial Messaging

- In FY 2021 the district's cash balance dips to as low as \$269,000
- The first negative EOM cash balance is January, 2022 -\$540,003
- Both of the results above are without stress?
 - Monthly cash balances fluctuate naturally, what-if?
 - › Delayed tax payments
 - › Reduced funding

What-if Delay Only (Without Reductions?)



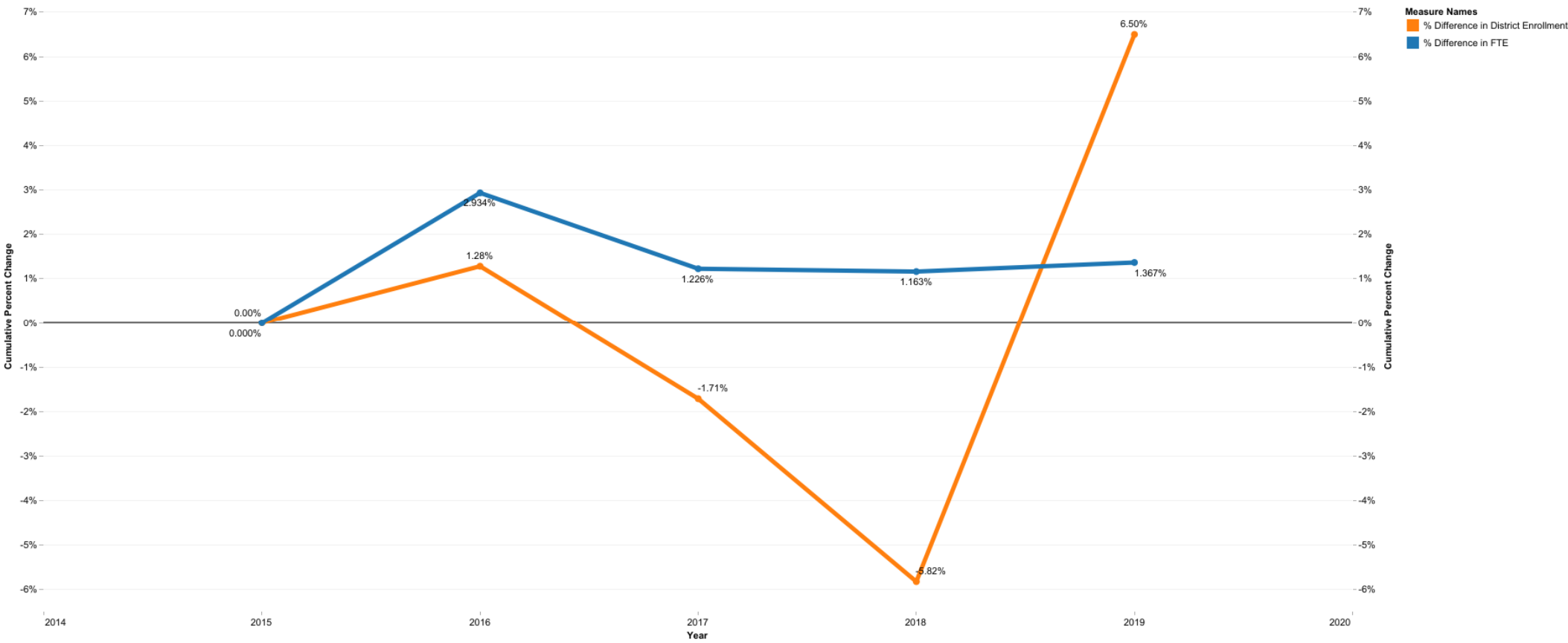
Why Project Three Years, Not Five?

- Don't 5x multiply the known unknowns!
- In crisis, short term and cash takes on more meaning
- What needs to be done to best position district financials next fiscal year

Benchmarking and Budget Response

- Rightsizing – Operationally
- Rightsizing – Repurpose/Reduce
- Downsizing – Deeper cuts that impact program deliverables

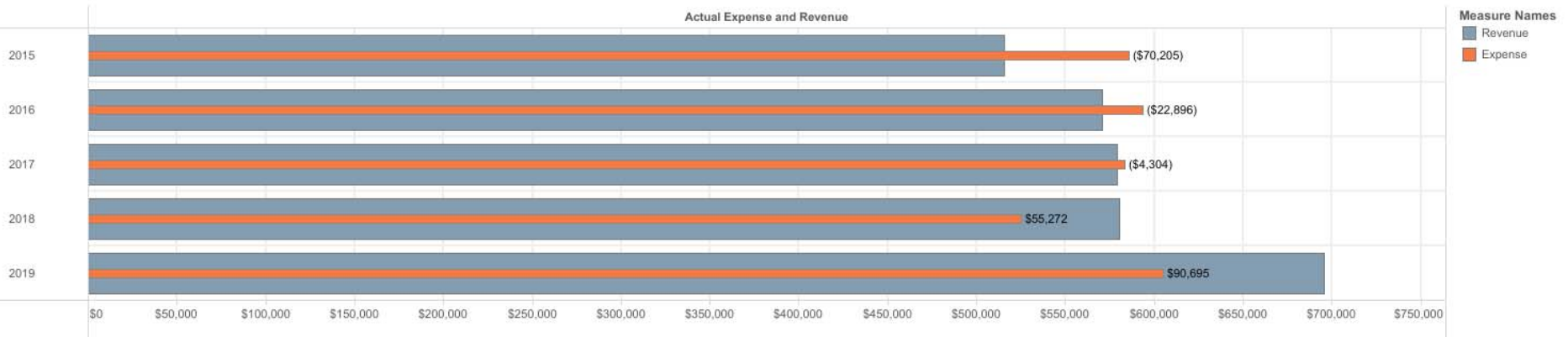
Changes in Teaching Staff and Enrollment



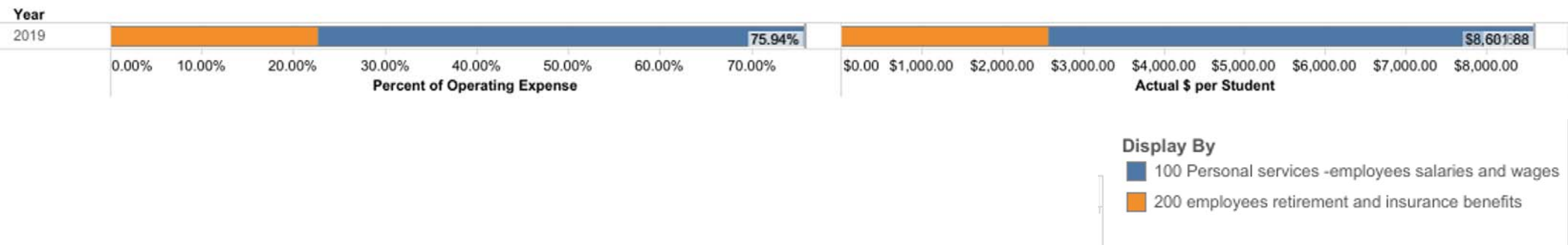
Food Service Operations

Revenue Versus Expense History

Food Service
Revenues: Fund 006 Excluding Sources 5000
Expenses: Fund 006 Excluding Functions 7000
Source: ODE Annual Financial Reports (Cash Basis)

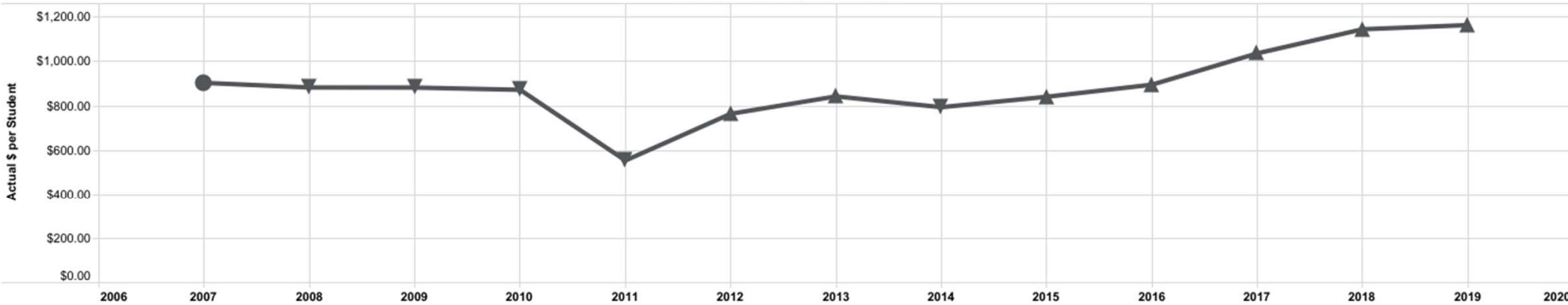


Salaries & Benefits as % of Total Expense

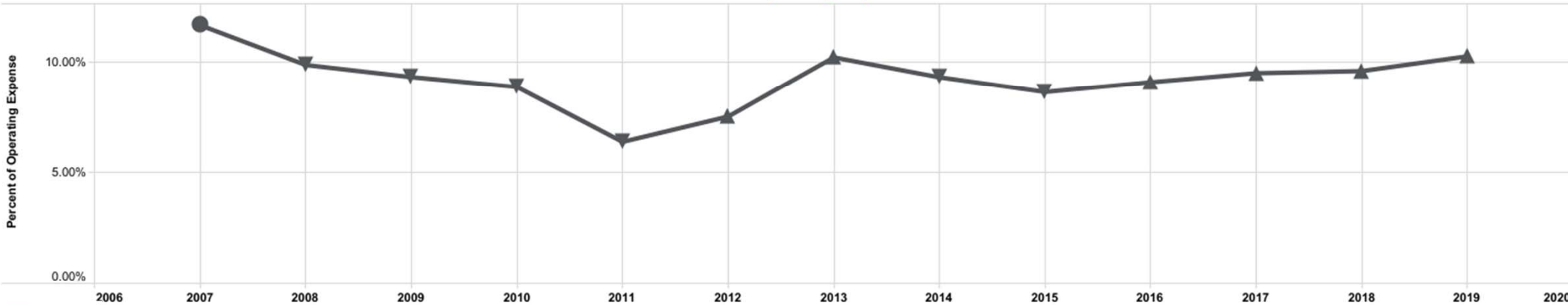


Non-Personnel, Non-Instruction Operating Spending

Actual Dollars per Student



Percent of Operating Expense



Right Size, Right Size, Down Size??

- Right Size – exploit opportunities in good times and bad – especially in bad
 - Should be done but difficult to do sometimes
 - Includes personnel (enrollment vs. staffing)
- Right Size
 - First, repurpose and look for efficiencies to reduce cost with minimal program impact
- Down Size??
 - Sense of urgency what is the interim forecast (CASH) telling you?
 - May not have resources to continue what you are doing
 - More unknowns than knowns
 - Personnel is always biggest expense
 - Especially challenging with high purchased service cost – tuition

Fundamentals

Timeliness

- When did you know? When could you have known? When did you tell me?
- What timeline resources are available

Replace speculation with

- Sound financial planning
- District's financials and assessment of urgency
- Timely information gathering and update “what-if” interim modeling

The Forecast5 Team is Committed to supporting clients with up-to-date knowledge and tools like the COVID-19 Crisis Cash Flow Analysis



NEXT STEPS TO TAKE...

- ➔ **Interested in learning more about how we can help you with modeling forecast scenarios and communicating your situation with 5Cast?**

Contact Josh Rader to schedule a personal one-on-one at jrader@forecast5analytics.com