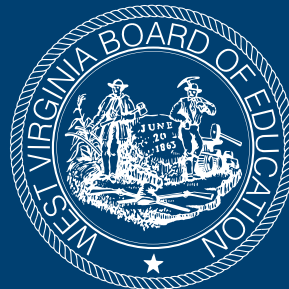West Virginia Department of Education

2021
STRATEGIC PLAN

March 2022 Update to the West Virginia Board of Education

State Board Goal 1 | Objective 3
Facilitate access to technology, connectivity and innovative practices

Executive Summary

The March meeting of the State Board of Education will focus on the Strategic Plan Update for *Goal 1: Lead a Thorough, Efficient and Effective Education System and Objective 3. Facilitate access to technology, connectivity and innovative practices*. This presentation will provide evidence of best practices from the Office of Data Management and Infrastructure Systems.

The Office of Data Management and Information Systems Office is organized around the following three service areas:

1. West Virginia Education Information System (WVEIS)
2. Data Analysis and Research
3. Infrastructure and Network Operations

Office staff collaborate across all offices at the West Virginia Department of Education (WVDE), other county/state agencies, local school districts, and the broader educational communities to provide technology and data management services. As a matter of fact, the West Virginia Office of Data Management and Information System has several nationally acclaimed services not necessarily implemented in all states, as indicated in this document. In addition, the WVEIS system is one of the few centralized data management and information systems in the nation. Many states do not provide for a centralized 1) data management system for their counties (Instead, the counties create and pay for their own systems), 2) programs/systems of Career and Technical Education (CTE) inclusion into their state centralized system, 3) online individualized education plan (IEP) for special needs students, and 4) form that requests a listing of all required accommodations for special needs students.

This Strategic Plan Update for *Goal 1: Lead a Thorough, Efficient and Effective Education System and Objective 3. Facilitate access to technology, connectivity and innovative practices* will offer evidence on how each of these three service areas leverage best practices, as well as innovative practices, into the areas of technology and connectivity. The WVDE's efforts have yielded some of the most comprehensive and innovative technology solutions for West Virginia's evolving technology within our school system.

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Office of Data Management and Information Systems Organizational Structure

The chart below identifies the three service areas within the office. It also briefly defines the responsibilities of each service area. These three service areas work together very closely to assure the student educational data created by WVEIS can be securely stored in WVEIS through the data center infrastructure, which includes secure servers, routers, switches, filters, and firewalls.

Chart 1. Office of Data Management and Information Systems Organizational Structure

INFRASTRUCTURE & NETWORKING
Ensures well-protected connections and access for users statewide.

DATA ANALYSIS & RESEARCH
Uses securely-stored data in WVEIS for local, state, and federal reporting.

WVEIS
Creates and maintains a stable infrastructure to securely house student educational data.
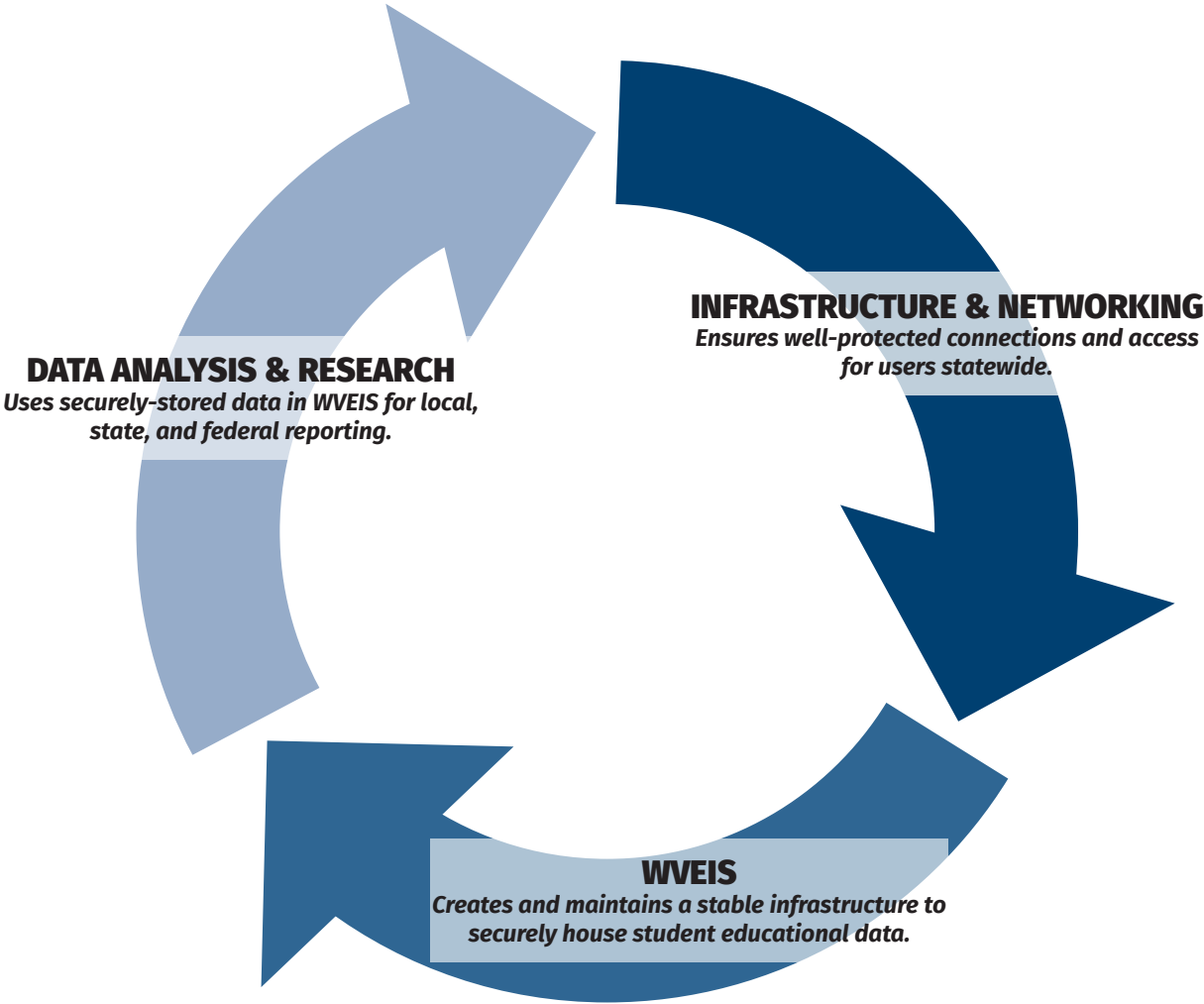
West Virginia Education Information System (WVEIS) Service Area

WVEIS is the WVDE's statewide longitudinal data system (also called an SLDS). The secure WVEIS servers store demographic information and education records for every student enrolled in public education. These education records, data, and other information are entered into WVEIS by the staff at the local school, district, or by WVDE staff. Other data and information may be imported from secure files into WVEIS.

WVEIS houses data for 252,357 students and is used by 38,399 professional and service personnel. The WVEIS staff is also responsible for creating applications to capture additional data elements necessary for state and federal reporting or to assist counties in making data-driven decisions for their students. Chart 2 outlines the technology applications and innovative practices implemented through WVEIS.

Chart 2. West Virginia Education Information System (WVEIS)

Activity*	Purpose	Stakeholders	Impact
WV Virtual School Integration with student schedules	Students are enrolled in virtual courses based on a school's Master Schedule	» Educators and Administrators » WVDE Leaders and Staff » Students	13,699 full-time virtual students automatically scheduled – eliminating the need for manual registration at schools
Integration of WV Virtual School grades with WVEIS transcripts	Virtual school grades can be automatically added to WVEIS transcripts	» Educators and Administrators » Students	294 schools with virtual course enrollment – countless man hours manually entering virtual grades
Data feeds for county vendors	Automatic process to import student data for educational support software (iReady, Schoology, etc.)	» Educators and Administrators » Students	473 data feeds, serving all counties – eliminates manually adding student info to these programs
Home-school Application	Application created to house required data for home school students	» Legislators » WVDE Leaders and Staff » County Administrators	19,341 active records with reporting capability to track required data
Education Evaluation Application	Redesigned application to store educator evaluations per Policy 5310	» Educators and Administrators » WVDE Leaders and Staff	19,887 evaluated staff with county- and school-level reports for administrators
P-EBT Student Data Collection	Collected, certified, and shared attendance data for students eligible for P-EBT reimbursement	» Educators and Administrators » WVDE Leaders and Staff » Students and Parents	224,688 students received P-EBT benefits during 2020-2021

Activity*	Purpose	Stakeholders	Impact
Professional Development	WVEIS offers formal conferences in the summer and winter along with ad hoc training as requested	» Educators and Administrators » WVDE Leaders and Staff	Administrators and others have improved knowledge and skills to ensure the collection of accurate and complete data, and we receive valuable feedback for improvement
WVEIS Helpdesk	Helpdesk staff work with users statewide to offer training, troubleshooting, and system maintenance	» Educators and Administrators » WVDE Leaders and Staff	Dedicated assistance with student and financial applications ensures minimal disruptions in county data processes
Statewide Technology Survey	Assisted district staff with development of survey to determine students' and school staff members' home technology access	» Educators and Administrators » WVDE Leaders and Staff » Students and Parents	Survey results allowed districts to prepare for student access needs during the 2020-2021 school year as well as apply for ESSERF and ECF funding
Online IEP	Developed and maintain nationally recognized online IEP system integrated with WVEIS to create comprehensive student records easily accessible by teachers	» Educators and Administrators » WVDE Leaders and Staff » Students and Parents	46,663 students with IEP services integrated directly into WVEIS student data
WVEIS Accommodations 326	Maintain a seamless system for monitoring eligibility for and receipt of assessment accommodations for students with special learning needs	» Educators and Administrators » WVDE Leaders and Staff » Students	Assessment accommodations are automatically imported into assessment applications, eliminating manual entry
Migration to WVEIS 2.0	Migration to the new SLDS will include an integrated PEP plan, easily accessible subgroup data, a more controlled data interface, and relevant access for parents and students	» Educators and Administrators » WVDE Leaders and Staff » Students and Parents	Data will be more accurate, data entry will be easier, and new system will include many features based on user feedback

All work is ongoing

Data Analysis and Research Service Area

The Data Analysis and Research (DAR) team within the WVDE Office of Data Management and Information Systems provides support for education stakeholders through rigorous and objective research, evaluation, and data analysis; data reporting and customized reports in response to requests; training and technical support in the use of data tools such as ZoomWV and ZoomWV-e; and data governance, including the establishment of data standards, data reviews and validation, and ongoing data privacy efforts.

The DAR team supports nearly 6,600 individual school, district, and state staff members who use ZoomWV-e to review and monitor aggregate and student-level data. In addition to supporting the data dashboards in ZoomWV and ZoomWV-e, staff also create custom data reports for policymakers, colleagues, and other stakeholders. In the 2020-2021 school year, staff responded to more than 120 requests from customized reports from various stakeholders. Members of the team also provide detailed research and evaluation reports and data analyses to answer specific questions of interest to leaders, policy makers, and educators.

The team further assists staff and stakeholders throughout the state—including parents and students—in understanding students' privacy rights and the responsibilities individuals and agencies have for ensuring those rights are maintained. Team members actively support WVEIS staff and other WVDE colleagues in ensuring that data are accurate and submitted in a timely manner. The Data Analysis and Research Service Area's technology and innovations are outlined below in Chart 3.

Chart 3. Data Analysis and Research

Activity*	Purpose	Stakeholders	Impact
Quality Checks & Reviews	Automated and custom-developed data checks ensure accurate and reliable information	» Administrators & Educators » State Officials » WVDE Staff	Accurate and reliable data are available for use in decision making, reporting, and funding
Data Analysis	Data analyses support data-informed decision-making	» State & Federal Officials » Policy Makers » Educators & Administrators	Analyses provide rapid answers to questions for planning and decision making
ZoomWV Data Dashboards (Public)	Publicly available data provide transparency and accountability and support data-informed decision-making	» Local, State, & Federal Officials » Educators & Administrators » Families & Communities	Key education indicators are freely available to all stakeholders
ZoomWV-e Data Dashboards (Private)	Private dashboards provide opportunities to use data in deep and innovative ways to support decision-making	» State & Federal Officials » Educators & Administrators	Comprehensive and longitudinal data for students, schools, and districts are readily available to educators

Activity*	Purpose	Stakeholders	Impact
State & Federal Reporting	Ensure federal and state reporting requirements are met to promote accountability and compliance	» State Officials » Federal Officials	Education agencies are compliant with reporting requirements and are transparent with stakeholders
Ad Hoc & Customized Reporting	Custom-developed data queries and reports to respond to specific data needs or questions for which stakeholders cannot find answers in existing sources	» State & Federal Officials » Policy Makers » WVDE Leaders & Staff » Educators & Administrators » Researchers & Partner Organizations » Families & Communities » Media/Reporters	Ad hoc reporting improves transparency by meeting stakeholder information needs through provision of accurate, responsive data
Research & Evaluation Projects	Provide information about the success and impact of initiatives and policies on educator and student experiences and performance	» Legislators » State Officials & Policy Makers » WVDE Leaders & Staff » Educators & Administrators » Partners & Other Stakeholders	Results of rigorous research and evaluation provide stakeholders with high-quality, unbiased information to make decision about what works best for students and teachers
Trainings & Technical Assistance	Improve understanding, performance, and accountability in the use of data tools and in student privacy protections	» Educators & Administrators » WVDE Staff	Educators, administrators, and others have improved knowledge and skills to protect student privacy and to find and use relevant information in support of high-quality decisions
Data Privacy	Ensure sufficient policies, practices, and guidelines to keep students and their information safe	» Educators & Administrators » WVDE Leaders & Staff	Guidance and resources support improved awareness and privacy protections for students and families
Data Governance	Improve understanding and promotion of efforts to maintain and enhance the quality, timeliness, utility, and security of education data	» State Officials & Policy Makers » WVDE Leaders & Staff » Educators & Administrators	Clarifying rules, processes, and procedures for collecting, protecting, and reporting data improve its quality and usefulness for stakeholders
Legislature	Provide necessary and helpful information to inform and inspire legislative proposals and decision-making	» Legislators	Legislators have accurate, timely information to inform policy discussions

***All work is ongoing**

Infrastructure and Network Operations Service Area

The Infrastructure and Network Operations team handles a variety of tasks, including (a) maintaining data center infrastructure including servers, routers, switches, filters, and firewalls; (b) maintaining statewide network and internet access to K-12 schools across the state; (c) maintaining WVDE phones and computer-related equipment; (d) providing digital forensic analysis; (e) Office 365 management; (f) providing web application development and web server support; and (g) refurbishing office computers for new use in K-12 classrooms (secondlaunchWV). This team also provides professional development specializing in Office 365 tools and onsite desktop support for the WVDE staff.

In support of infrastructure and network operations in schools and districts, staff members in the Office of Data Management and Information Systems provide consultation, guidance, and technical support for counties submitting e-Rate applications and applications for other technology programs (including Emergency Connectivity Fund [ECF] devices). These services ensure that districts have an in-state expert to provide no-cost assistance and have helped districts secure nearly $38 million dollars for technology resources and saved more than $1.25 million dollars that might otherwise be spent on consulting fees for these programs. Chart 4 provides examples of the technology, connectivity and innovation that are available to support local school districts, schools and students.

Chart 4. Infrastructure and Network Operations

Activity*	Purpose	Stakeholders	Impact
KidsConnect	Provide internet access by placing hotspots in outdoor areas near schools and other public areas	» County Educators and Administrators » Students & Families	988 hotspots across the state provides secure access to all WV students
Tools for Schools	Administer statewide contracts for the local purchase of technology resources and systems and assist local specialists to assure sufficient technology-related professional learning opportunities	» County Educators & Administrators » Other School & County Staff » Students » WVDE Staff	A total of $8,554,745 distributed statewide, all counties
Emergency Connectivity Fund	Assist counties/schools with application process for ECF reimbursements; provide guidance for management of sponsored devices	» County Administrators and Educators » Other School & County Staff » Students	Assisted 11 counties with local filings (for more than $13 million) and filed on behalf of 15 counties (for more than $20 million)
E-Rate Support	Assist counties with the E-Rate application process to maximize funds for school connectivity costs	» County Administrators and Educators » Other School Staff » Students	Assisted 18 counties with e-Rate applications totaling more than $4 million for West Virginia counties

Activity*	Purpose	Stakeholders	Impact
Microsoft Teams for Classrooms	Students and teachers are imported into Teams for each class. Teachers can assign classwork and connect with students	» County Administrators and Educators » Other School & County Staff » Students	Importing students into groups saves teachers considerable time and effort, allowing for easy communication with students.
InTune Mobile Device Management	Mobile Device Management (MDM) software available for management of student devices	» County administrators and educators » Students and Families	Providing MDM access for student devices saves counties money in software and loss
SecondLaunch	Program to recycle and upgrade technology from state agencies to donate to schools	» County Administrators and Educators » Other School & County Staff » Students	19,843 items have been donated in 47 counties – saving schools a total of $6,943,375
Office/Teams Training	Provide training and technical support in the use of Microsoft Office 365 tools for education, efficient work, and collaboration	» Educators and Administrators » Students » County Staff » WVDE Staff	Offered live training and video training resources, made available to all users in the WV education system
Help Desk for WVDE Technology	County assistance with Single Sign On, Webtop, and Office 365/Teams access and processes	» County Administrators and Educators » Other School & County Staff	Direct connection to assistance ensures users are able to access essential programs with minimal time loss

All work is ongoing

WVDE Data Collections Items and Respective Due Dates

Data collection is an integral part of each of the three service areas. Chart 5 provides a list of all ongoing data collections necessary for federal and state reporting - shown with the dates that these collections are completed by district stakeholders. Most of these data are entered and stored inside of WVEIS as student level data. From here, ZoomWV retrieves these data and makes it more accessible to end users by displaying it in secure and reliable aggregate public reports. These secure reports allow for better educational decision-making by West Virginia school administrators and educators. The data are kept secure by maintaining the data center infrastructure, which includes secure servers, routers, switches, filters, and firewalls.

Chart 5. WVDE Data Collection Due Dates for 2021-2022

Office of Technical & Adult Education

Description	Due Date
ACE- COE Report	12/1
ACE- IPEDS	10/1, 2/1, 4/1
Adult Education - Federal Financial Reports, Narrative Report and Assessment Policy to USDE	12/31
Adult Education - MOU with Workforce WV for the Interagency Collaboration Team (required by WIOA and signed annually)	7/1
Adult Education - Statistical Reports and Data Quality Checklist to USDE	10/1
Adult Education, SPOKES and Public Service Training program applications/budgets are due to WVDE	4/1
EPIC Application	12/1
Governor's Workforce Credential	6/1
Modernization Grant-ACE & High School	4/1
Modernization Grant-High School Mini	12/1
NOCTI - B&I Reviews	6/1
NOCTI - Post-Test	6/1
NOCTI - Pre-Test	12/1
NOCTI - Classroom 2 Career	6/1
SPOKES - budget and application to DHHR	5/1
SPOKES - Final expenditure reports (12-month only grants) to DHHR	7/1
SPOKES - quarterly expenditure and statistical reports to DHHR	3/1, 6/1, 9/1, 12/1
Tech Centers That Work Application	4/1
US Presidential Scholar Nomination	10/15
WVEIS - CTE End of Year	6/1
WVEIS - Placement	12/1
WVEIS Calendar - Option Pathway Participation	6/1
Yanni Scholar	4/15

Office of Support and Accountability

Description	Due Date
County Strategic Plan	4/1
Local Board of Education Self-appraisal	8/15
LSIC Committee member election	9/15
LSIC Organizational meeting	10/1
School Crisis Response Plan	8/1
Teacher Evaluation Self-reflection	10/1
Evaluator Submits Teacher Learning Goals	11/1
Evaluator conducts observation for initial and intermediate progressions prior to:	11/1
Evaluator conducts second observation for initial and intermediate progressions	11/1-1/1
Evaluator conducts third observation for initial progressions	1/1-3/1
Evaluators complete final observation for those on initial and intermediate progressions	3/1-5/1
Counselor Evaluation Self-reflection	10/1
Goal setting meeting with principal	11/1
Face-to-face meeting between counselor and principal before:	6/15
School Leaders Self-reflection	10/1
Meeting with superintendent or designee	10/1
West Virginia Leadership Survey	Second Semester
Superintendent finalize evaluation, determine professional learning needs for the upcoming school year	5/1-7/1

Office of Data Management & Information

Description	Due Date
Ongoing Student Data Collection & Maintenance	6/30
Ongoing CIPA/E-rate Compliance	6/30
EOY (End-of-Year) Enrollment	6/30
EOY Full Academic Year (FAY) Verification	6/30
Private/Parochial School Enrollment	6/30
Homeschool Notices & Assessments Report	8/1
September Enrollment (1st Month)	9/1
Cohort Verification (CTE & Graduation)	9/6
2nd Month: October Enrollment	10/21
Master List of Schools (Verification Snapshot in October)	10/28

Office of Teaching and Learning

Description	Due Date
Assessment	
Hourly Student uploads to TIDE	Year Round
Open/Close School List	9/17
College Board Data (SAT School Day from WVEIS)	1/11
Private School Student Assessment ID Requests	1/21
Home School Student Assessment ID Requests	1/1 - Close of County Test Window
326 form data for ELPA21	12/21
326 form data for WVGSA/SAT/DLM	2/18
Timely release of Reports	9/30
SAT School Day Staff Updates	9/2
Early and Elementary Learning	
Data Entries: WV Early Learning Reporting System: Pre-K	Year Round
Data Entries: WV Early Learning Reporting System: Kindergarten	Year Round
Calendar Due Date	5/4
NTID Applications Due Date	5/4
Pre-K Program data verification	10/15
WV Pre-K fiscal report	10/15
Middle and Secondary Learning	
Governor's School for the Arts	1/28
Governor's Honors Academy	3/8
Governor's STEM Institute WVU I (7)	3/31
Governor's STEM Institute WVU II (7)	3/31
Governor's STEM Institute 8	3/31
Governor's School of Entrepreneurship	3/25
Golden Horseshoe Test - Essay Test	2/8
Golden Horseshoe - Online Exam	2/15-2/24
US Studies Exam for High School	Spring 4/8-6-1 & Fall 11/22-1/28
Civics/Citizenship Test	Spring 4/8-6-1 & Fall 11/22-1/28
AP® Exams	5/2-5/13
STEP7a Plans - Personnel Plans	5/1
STEP7a Plans - Full Plans	6/1
PROMISE Scholarship Eligibility Data Verification	10/1, 3/1, 7/1
Educator Development & Support	
National Board for Professional Teaching Standards Registration	2/28

Office of Federal Programs

Description	Due Date
Early Childhood Transition plan monitoring check	Monthly Spreadsheet
Secondary Transition Plan monitoring check	5/2
One-year follow-up survey of post-school outcomes	10/1
School Nurse Needs Assessment	6/15
ESEA Consolidated Application	7/1
County Strategic Plan	6/30
Child Nutrition Monthly Claims	10th of Each Month
Child & Adult Care Food Program Application	9/1
PrimeroEdge Free/Reduced Price Meal Verification	10/1
2nd Review of Child Nutrition Application Report (new directors only)	10/31
All Child Nutrition PrimeroEdge Verification Completed	11/15
Child Nutrition Verification Collection Report entered into ACES	2/1
School Food Authority on-site monitoring completed by county	2/1
Summer Food Service Program (SFSP) Application Due Date	5/20
Child Nutrition Budget submission	6/1
National School Lunch Program (NSLP) Application due in ACES	6/30
Health Inspections due in ACES	6/30
Begin collection of National School Lunch Program (NSLP) Free/Reduced Applications	7/1
National School Lunch Program (NSLP) Snack Monitoring (twice per year for each site)	7/1-6/30
Child & Adult Care Food Program (CACFP) At-Risk Monitoring (3 per year)	10/1-9/30
Wellness Policy Assessment	Once Every 3 Years

Office of School Operations & Finance

Description	Due Date
School Facilities Data	
CEFP Annual Update	12/1
CEFP Amendments (as needed)	Varies
Quarterly Air Quality Report	15 Days After Quarter End
End of Year Facilities Square Footage Certification	6/30
School Safety and Security Report for LOCEA	10/1
SBA Funded Project Facility Review Response (When Applicable)	Varies
Finance Data	
Certified List of Personnel (First Month)	9/8
Certified List of Personnel (Second Month)	10/8
Annual Proposed Budget	5/30
Schedule of Proposed Levy Rates	3/3
Levy Order and Rate Sheets	3rd Wednesday In April
Certified October Enrollment (Second Month)	October
Attendance Incentive Bonus Absence Verification	6/17
Early Retirement Incentive Bonus Data Collection	3/18
Unaudited Annual Financial Statement and Related Schedules	9/28
Medicaid Administrative Claims (MAC) Quarterly Cost Reports	45 Days Following End of Quarter
Medicaid Annual Cost Report	12/31
Medicaid Fee-for-Service Billings	Monthly (As Needed)
Superintendent Salary Survey	11/12
Various Surveys for Legislative Requests	As Needed
County Financial Data File WVEIS Submission	8th Day Following Month End
Indirect cost Certification	3/25
Salary Schedule Certification	5/27
Workers' Compensation Data Submission	11/18
Budget Journal Entry Submissions	Monthly (As Needed)
PEIA Reallocation Data Collection	2/11
Student Transportation Data	
Certified Student Ridership	1/31
Certified Bus Fleet Data	7/31
Certified Bus Mileage Data (Collected Monthly)	7/31

Coming Attractions

At the June Board Meeting, the WVDE will offer evidence of how the Department is achieving Goal 2, Improve Student Achievement and Accountability, Objective 3, Create data for county boards of education to utilize in responsible local decision-making, and a preview of WVEIS 2.0.

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