



# 2024

## Office of Data Governance and Analytics Annual Report

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Office of the Secretary of Administration

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## EXECUTIVE SUMMARY

The Virginia Office of Data Governance and Analytics (ODGA) is a catalyst for dismantling data silos across agencies, helping them improve their data governance, sharing, and providing technical assistance for agencies to utilize their data for reporting and analytics. This annual report outlines the significant strides made by ODGA throughout 2024. Our commitment to government transparency, efficiency, and service excellence has guided our initiatives, ensuring alignment with state priorities.

In 2024, ODGA continued to foster a comprehensive data governance framework aimed at improving data quality, training availability, and accessibility to templates and guides for agencies to implement their own data governance strategies and policies. Key initiatives included the continuation of the Executive Data Board, Data Governance Council, and Data Stewards Group, which led ODGA in establishing a data strategy for the Commonwealth, provided a platform for ODGA to share fundamental and critical data governance information, and allowed for invaluable feedback from agencies about what trainings were needed within their agencies. A Data literacy curriculum was launched to enhance staff capabilities in data management practices, where many agencies provided feedback related to the curriculum creation. Furthermore, ODGA invested in advanced data quality tools to facilitate the accurate management of data and increased data quality for agencies.

The ODGA team assisted agencies with a variety of projects, including helping agencies utilize their data for reporting and analytics purposes, the establishment of a data governance program, ad hoc support, allowing agencies to use the ODGA technical environment, and more. By working with ODGA, agencies have made data and analytics a priority within their agencies, allowing them to make more data informed decisions.

In summary, 2024 has been a transformative year for ODGA. Our focused efforts have laid a solid foundation for continued growth and excellence in serving agencies. We remain committed to assisting agencies with data governance, sharing, and management and look forward to advancing Commonwealth data objectives in the coming years.

## AGENCY DATA GOVERNANCE

### DATA QUALITY

The Commonwealth is not unique in its desire to improve our data quality. The data maturity assessment highlighted this area is a top concern for agencies and as we move to a more data-driven organization, the data quality issues of the past are becoming apparent in the visualizations and dashboards being developed. As the Commonwealth begins to leverage the power of AI to gain efficiencies, problems with data quality will become increasingly urgent to address.

To address the challenge of accurate, complete and timely data, ODGA has implemented a comprehensive program to improve data quality across the Commonwealth.

- **Public Awareness Campaign:** ODGA designated January 2024 as Data Quality Awareness month and developed social media posts, posters, and informational resources targeted at the front-line users who enter data into systems to help them understand the importance of data quality and the impact poor data quality has on the Commonwealth.
- **Targeted Training:** We partnered with the Department of Motor Vehicles to develop two short custom videos for their end users to guide them in system-specific best practices for ensuring data quality.
- **Data Quality Tools:** To assist data stewards with addressing data quality issues in their agency, we created a guidebook on using SQL queries to check for data quality issues such as null values, inconsistent formats, and out of range data. This resource is a simple, no cost way for agencies to review their data for quality issues.
- **Strategic Partnerships:** At the end of September, ODGA signed an agreement with Informatica to provide their Data Quality Profiling tool as a service to agencies. ODGA has purchased capacity to scan all data ingested into our data warehouse and data lake and can conduct preliminary scans for agencies in the Data Trust. If agencies want to use the tool to remediate their data quality issues or have more data than our license can scan, ODGA can easily ramp up capacity and charge the agencies with the delta cost, thus achieving economies of scale for the Commonwealth. The Virginia Department of Health, The Department

of Social Services, and The Department of Treasury have volunteered to be the pilot agencies using this tool and ODGA expects to see results in 1st quarter 2025.

Through public awareness campaigns, targeted training, and strategic technology partnerships, ODGA is committed to ensuring the accuracy and reliability of the Commonwealth's data. By fostering trust in our data, ODGA is enhancing government efficiency and improving public services.

## EMPLOYEE DATA LITERACY COURSES

To ensure that government employees have the necessary skills to effectively utilize and interpret data, ODGA developed a data literacy curriculum. This curriculum is designed to meet the specific needs of employees across various agencies, departments and with varying levels of expertise. By providing targeted training, we aim to equip employees with the knowledge and tools required to make informed decisions and drive positive outcomes.

The curriculum incorporates training from a variety of sources such as internal, online, and paid vendor. Since basic data literacy is needed for all employees, ODGA developed the training in-house to provide a free resource for agencies to enhance their employee's data literacy skills. Topics covered range from fundamental data concepts such as causation versus correlation; mean, median, and mode; basic data visualization; and misleading graphs. Externally available classes include topics such as advanced data analysis, R and Python coding, and AI/ML.

We can ensure that employees receive the most relevant training to support their work. This investment in data literacy will not only enhance the quality of decision-making but also foster a more data-driven culture throughout the Commonwealth.

## DATA STRATEGY

To guide the Commonwealth's data-driven transformation, ODGA embarked on the development of a comprehensive data strategy to drive our goals and objectives. This strategic roadmap outlines our agency's vision for data utilization, identify key priorities, and establish a framework for data governance and management. To ensure that the data strategy aligns with the needs of our organization, ODGA engaged members of the Executive Data Board in a collaborative process at the August 22, 2024, meeting. Through their valuable insights and expertise, the Executive Data Board helped shape a data strategy that will drive innovation, improve decision-making, and enhance public services.

## DATA MANAGEMENT MATURITY ASSESSMENT

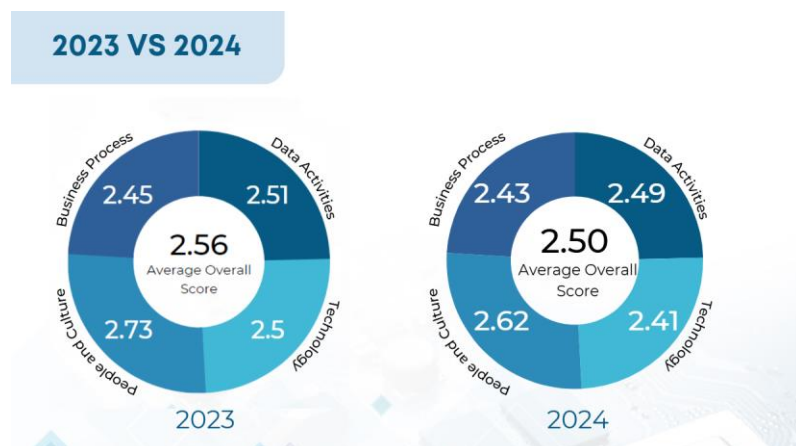
In 2022, ODGA began sending a Data Management Maturity Assessment to Executive Branch agencies to better understand data maturity in the Commonwealth. The Data Management Maturity Assessment is a self-assessment with 30 questions covering 4 key areas: People and Culture, Data Activities, Business Processes, and Technology. ODGA uses these answers in part to determine what areas of data governance and analytics agencies are excelling in, where more assistance is needed, and how we can provide services to help agencies overcome data challenges.

In 2022, 21% of agencies identified as being in a reactive level, 45% of agencies reported being stable, and 34% of agencies reported at the proactive level. Results from the 2022 assessment are in appendix

In 2023, the survey was sent again to agencies. 18.8% of agencies identified as being in a reactive level, 45.3% of agencies identified being stable, and 35.9% of agencies reported at the proactive level. In 2024, there were 45 respondents to the survey and 24.4% of respondents reported their data management programs being reactive, 44.6% reported their programs being stable, 26.6% reported their programs being proactive and 2.2% reported their programs being predictive.

Questions from the assessment were monitored from 2023 to 2024, including questions related to an agency's approach/plan to improve data quality, metadata management, data modeling, if data-based roles within the agency exist, and if there is data activity management support.

The Office of Data Governance and Analytics will send this survey to agencies yearly to determine what areas of data governance and analytics agencies are excelling in, where more assistance is needed, and how the office can provide services to help agencies overcome data challenge



Above: Graphics showing Data Management Maturity Assessment Scores in a variety of areas.

## DATA SCANNING

ODGA's commitment to safeguarding sensitive data has sharpened our focus on data protection. Understanding that effective protection hinges on awareness, we've implemented solutions for identifying and classifying sensitive data.

In 2023, ODGA implemented Purview for Data Governance, a Microsoft technology designed for scanning structured data. These efforts have resulted in the scanning of over 3,722 tables in Purview, pinpointing sensitive information such as SSNs and bank account numbers. Once the sensitive data was identified, we tagged the datasets with the appropriate classification, to ensure the proper data protection measures were in place.

Building on this integrated BigID into the ODGA portfolio in 2024, allowing an agency to scan unstructured data sources like OneDrive and file shares. During our initial scans across multiple agencies, we identified opportunities to enhance the Commonwealth's data protection practices. As of November 2024, 14.75 million files have been scanned through the BigID solution.

Our data scanning service offers a proactive approach to uncovering hidden risks associated with previously unknown sensitive data, further solidifying our commitment to excellence in data security.



## COMMONWEALTH-WIDE DATA CATALOG

ODGA is building a Commonwealth-wide catalog of data assets to allow agencies to easily find and access trusted data so they may garner data-driven insights and perform in-depth analysis that was never possible before.

ODGA successfully implemented the beginnings of a data catalog that will significantly transform our data management and utilization processes in the future. ODGA provided all executive branch agencies with a list of the data assets previously collected by VITA and ODGA and asked them to validate it and determine whether the names of the datasets and/or the data could be shared with other agencies. This inventory has provided a clearer overview of our data landscape, aiding in better data governance and management, and has made it easier for agencies users to discover and access data assets. Over 3700 datasets have metadata available via Purview, Over 554 datasets have been fully cataloged, and agencies are willing to share 57% of those with other agencies.

Regular updates and improvements based on user feedback and technological advancements will keep the catalog relevant and valuable. The plan is to continue to expand the catalog to include more information about datasets over time. The implementation of a data catalog will lead to significant improvements in data discoverability, governance, and management. It will empower our users with better access to data, facilitated collaboration, and enhanced our ability to make data-driven decisions. In the future, we plan to add dashboards and reports to the inventory and enhance the catalog with request workflows to improve data sharing.

## AGENCY TRAINING AND RESOURCES

ODGA strives to help Commonwealth of Virginia Executive Branch agencies improve their data governance models. The first step in this effort is to make sure that agencies are well educated on various data roles and providing access to training for the entire Commonwealth. This training works to start the foundation for understanding the needs for data governance roles in Commonwealth organizations.

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### DATA GOVERNANCE ROLE BASED TRAINING

ODGA recognized the need for data governance skill development and has addressed training in several ways. All agencies are required to provide role-based training to key roles such as Data Owner and Data Custodian. ODGA developed the required training for data owner and custodian training in partnership with The Department of Motor Vehicle's (DMV) eLearning team which avoided over \$60K in costs if done with third party resources. The training is provided at no cost to all Commonwealth agencies and localities.

The training is available in DHRM's COVLC and if an agency uses a different Learning Management system like KnowBe4, ODGA can send the training files (SCORM) directly to the agency to be uploaded to their system and track the completion of the training. As of November of 2024, ODGA has provided SCORM files to 14 Commonwealth agencies and organizations and over 79 people completed the courses.

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### DATAVERSITY SCHOLARSHIPS

To enhance the skills of data stewards, ODGA offers Dataversity scholarships to agencies that are members of the Commonwealth Data Trust. Dataversity is a website which provides over 800 different online data governance classes on topics such as data strategy, data quality, machine learning, and more. Over 229 training sessions have been completed so far and thirteen employees have begun their Certified Data Management Professional (DM-BoK CDMP) preparation training.

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### RESOURCE LIBRARY

Our website features a comprehensive [resource library](#) designed to support agencies in enhancing their data governance practices. This library offers a wealth of free resources, including sample policies, sample data job descriptions, guidebooks, and trainings. These tools are meticulously curated to help organizations establish robust data governance frameworks, ensuring better management and utilization of their data assets.

## BOARDS AND COUNCILS

During the 2021 General Assembly Special Session, Senate Bill 1365 was passed that led to § 2.2-203.2:4 in the Code of Virginia that created the Office of Data Governance and Analytics (ODGA) within the Office of the Secretary of Administration, directed by the Chief Data Officer of the Commonwealth. Within the legislation is a multi-level governance structure established to govern the Commonwealth Data Trust (CDT) that includes the Executive Data Board, Data Governance Council and Data Stewards Group. These entities champion governance initiatives across agencies, adopting the National Information Exchange Model (NIEM) to standardize data exchange across agencies. In their 2013 Enterprise Architecture Document, The Virginia Information Technology Agency (VITA) states “By integrating NIEM into the Item 427 data standardization requirements, VITA will be able to enforce a common discipline, an established set of standards, and a shared vocabulary to support standardization of Person data across state government.”

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### EXECUTIVE DATA BOARD

The Executive Data Board is chaired by the Commonwealth Chief Data Officer and made up of leaders or their representatives from government agencies involved in sharing and analyzing data with the Commonwealth Data Trust. Their responsibilities are to turn the Commonwealth's data-driven goals into specific targets for their agencies, allocate resources for data management and sharing projects, and report to the Office about their agency's data analytics efforts and how they're implementing recommendations. The Board met on March 26th, 2024, and elected a vice chair, approved virtual options for attendance and meetings, and approved proxy voting. The group also presented in-flight data projects by agency and discussed areas for possible collaboration. As a part of their update, the Virginia State Police mentioned their efforts to collect Law Enforcement Suicide Data.

The Board also met on August 22nd, 2024. At this meeting, the group presented their in-flight data projects by agency and discussed possible areas for information sharing between agencies. The group also reviewed a draft Virginia Office of Data Governance and Analytics Data Strategy and provided feedback to the Office for opportunities for improvement.

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### DATA GOVERNANCE COUNCIL

The Data Governance Council includes employees from agencies on the Executive Data Board, chosen by those agencies' leaders. The Chief Data Officer (CDO) or their representative leads the Council. The Council's main roles are to connect agency operations with the CDO, give advice on data technology and policies, enforce governance rules set by the Board, supervise data projects, review data before it's made public, report recommendations to the Board, create privacy and ethical guidelines for Commonwealth Data Trust resources, oversee data sharing among members, approve new data resources managed by the Trust, and handle other tasks as directed by the CDO for managing the Trust.

At the Data Governance Council meeting on May 21st, 2024, the Council approved the previous Data Governance Council meeting minutes and approved a data governance policy. The group also learned more about the National Information Exchange Model (NIEM) Open model. The group also discussed providing more training options in the areas of data quality, data stewardship, and data for executive management for Commonwealth of Virginia employees.

On September 19th, 2024, the Council met and discussed projects from agencies previously discussed at Executive Data Board meetings, ODGA and other data governance updates, and received a brief demonstration of an Informatica Data Quality solution as ODGA will be implementing the solution in late 2024 and early 2025. The group voted to accept the previous meeting's minutes and when the next meeting should be.

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### DATA STEWARDS GROUP

The Data Stewards Group consists of employees from government agencies who are skilled in managing or analyzing data. Agencies are encouraged to appoint at least one data steward to join the Group, and they can appoint more depending on their organizational needs. The Group's main responsibilities are:

1. Providing technical expertise to the Executive Data Board and Data Governance Council to support data policies and practices.
2. Leading projects that improve data accessibility, sharing, and efficiency across the state government.
3. Handling technical issues related to standardized data.
4. Ensuring consistent data quality standards are met across agencies.
5. Educating data users on how to properly use, share, and protect Virginia's data.
6. Encouraging the registration of data assets in the Virginia Data Catalog by collecting and sharing metadata.
7. Collaborating with agency project managers and IT staff to ensure compliance with state data standards and sharing requirements.
8. Supporting decision-making based on accurate and reliable data, following state policies and best practices.

On Thursday, June 20th, 2024, the Data Stewards Group convened for the first time in 2024. The ODGA team presented Microsoft Purview and Big ID, two platforms used by the office to scan agency data. The group also provided feedback about data trainings that were discussed in a Data Governance Council meeting on May 21st, 2024. The National Information Exchange Model (NIEM) group also presented about the NIEM standards of data exchange.

On Thursday, October 10<sup>th</sup>, 2024, the group met again and approved the previous meeting minutes and elected a vice chairperson for the group. The group also participated in a data stewardship roundtable where they answered several questions about their data governance structures within their agencies. A guest speaker from the Library of Virginia shared about the library's retention policy for records management.

## AGENCY ENGAGEMENT

### VIRGINIA STATE POLICE

The VSP have identified a need to establish an internal data governance council. ODGA has worked to assist the agency in the creation of a data governance charter, which outlines the rules and regulations for the council. In addition to this, ODGA worked with the VSP to determine what training was needed for various roles within their agency.

### DEPARTMENT OF FORENSIC SCIENCE

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#### CASE STATISTICS ANALYTICS

The Department of Forensic Science (DFS) initially hired a contractor to build a Case Statistics dashboard. This dashboard was left unfinished, and the ODGA was asked to come in to complete it. ODGA worked to replicate the calculations underlying the initial dashboard and coded a visualization template to use. ODGA provided DFS with a data mart to query to drive data driven decisions and an automated dashboard that updates monthly and can now be found on the DFS public facing webpage. The dashboard provides information on case types including forensic biology, trace evidence, digital multimedia evidence, firearms, latent prints, toxicology, drugs, and questioned documents.

This Dashboard enhances government transparency and helps DFS leadership to understand where case related backlogs are forming, helping decision-makers allocate the necessary resources to reduce such backlogs.

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#### ILLICIT DRUG SUMMARY REPORT

DFS and the Department of Criminal Justice Services (DCJS) work together to publish an annual illicit drug summary report. DFS reached out to ODGA to determine if this was something that could be built upon and create an interactive dashboard that would be updated monthly. To accomplish this, the ODGA worked with both DFS and DCJS to replicate this process and build in some improvements. The ODGA stood up a SQL database to host the



drug data that is collected by DFS and enhanced by DCJS. From this new centralized SQL database, the ODGA was able to create Power BI Dashboards to display the information that was relayed in the annual report.

Through this new dashboard that will be hosted on the DFS public website, end users can view metrics related to certain illicit drugs in a more real time monthly view vs having to wait for the annual report to be published. This will allow the relevant parties a more insight into this data and will allow them to make more informed decisions.

## DEPARTMENT OF FORESTRY

The Department of Forestry (DOF) receives Forestry Product Tax information from the Department of Taxation to then calculate the amounts of the taxes which should be allocated to localities for reforestation and forest protection. Taxes are calculated on the quantity of forest products. Tax receipts are received annually. Generally, Tax provides a MS Access data file in late January or February to be processed by DOF and therefore available to support the planting season which is from February – March. A dedicated DOF employee conducted this process manually in 1.5 days. The manual process introduced the risk of human error. In addition, the DOF employee inherited the MS Access Process and was unfamiliar with MS Access.

ODGA worked to understand the relevant business processes and replicate the calculations performed by the MS Access, and through reverse engineering was able to automate the process using a SQL database in Azure. The updated process eliminates the risk of human error and decreases the time taken to complete the task. In addition, the new process eliminates the use of MS Access, which is outdated and not as robust or secure as modern technologies. Going forward, changes in tax rates or other inputs will be easier and better controlled.

The MS Access process was used by DOF to generate ad hoc reporting. An MS Access output was moved to Excel to create graphs, and the output has been used to calculate economic value of timber and logging activity. When leadership asked for historical reports, tracking down the report could be a daunting task as data storage was not standardized. ODGA was able to consolidate DOF's data, and present the data in a succinct, fast, and user-friendly Power BI dashboard. ODGA has written Power BI graphs to replicate the MS Excel graphs.

## DEPARTMENT OF SOCIAL SERVICES

The Department of Social Services (DSS) has a division called Serve Virginia. This group launched a study, the Virginia Community Engagement Index (VCEI), to better understand volunteerism and civic action in Virginia. This study was intended to provide insights into what challenges Virginians believe their communities are facing, assess where Virginians think action should be taken, and to understand what motivates Virginians to get involved in tackling these challenges. 6,393 Virginians were surveyed to develop these key insights. The DSS engaged the ODGA to present these survey results in a dashboard that will be available to the public to view. The dashboard breaks down some of the survey by question and the question can be further broken down by variables such as region, race, and gender. VCEI will now be able to provide this dashboard to organizations relying on volunteers, enhancing their ability to tailor volunteer opportunities and boost engagement. ODGA solicited feedback from DSS and the Serve Virginia Team, and they emphasized that capitalizing on the value of the VCEI data was enhanced by ODGA's help due ODGA's experience with Power BI.

## OTHER AGENCY AD HOC SUPPORT

ODGA has established itself as a valuable resource for agencies and localities across the Commonwealth as they address their data governance, visualization, and analytics needs. By providing expert guidance, technical assistance, and best practices, ODGA helps agencies to develop effective data governance frameworks, improve data quality, and enhance reporting capabilities.

In some cases, agencies have the technical expertise but would like to use ODGA technical environments to complete necessary data and analytics projects. This was the case for the Department of Human Resource Management, which used the ODGA Power BI environment to create dashboards. Similarly, the Virginia Employment Commission created their own dashboards in the ODGA environment. ODGA provided support as needed to these agencies.

ODGA has also supported agencies in a consulting manner on an ad-hoc basis for a variety of topics, including calls to explain technology platforms, data governance exploration, and participating in technical RFP processes for the state.

## COMMONWEALTH INITIATIVES

### OPERATION BOLD BLUE LINE (OBBL)

In October of 2022 the Public Safety initiative "Operation Bold Blue Line" was launched to identify and reduce violent crime in 13 specific Virginia localities. ODGA was engaged to manage data collection and consolidation, hosting this process within its infrastructure. ODGA sped up the data sharing process by using the ODGA Commonwealth Data Trust memorandum of understanding. This MOU was created in partnership with the Virginia Office of the Attorney General. Another key achievement was increasing the reporting frequency of datasets from localities to the Virginia State Police (VSP) from monthly to weekly. ODGA was responsible for presenting and visualizing data analytics to support the Public Safety Violent Crime Task Force in making informed decisions that benefit constituents. For example, data highlighting areas of higher crime enables targeted law enforcement allocation, with the effectiveness of increased police presence being measurable. The ODGA Team utilized Data Warehouses and Azure SQL databases to create Power BI dashboards, consolidating data from the 13 localities into one clear, concise view. This dashboard allows Commonwealth leadership to access weekly updates for informed decision-making regarding law enforcement resources and violent crime prevention. Since 2023, ODGA has actively supported the Office of the Chief of Staff and the Secretary of Public Safety and Homeland Security with ad hoc requests, providing reports on violent and property crime statistics.

### VIRGINIA PERMIT TRANSPARENCY

To attract and retain skilled workers and businesses across the Commonwealth by creating a Virginia Permitting Transparency (VPT) website that would act as a "one-stop-shop" for permitting needs, maintaining full transparency on the permitting process. ODGA was enlisted to assist with the data pipelines and visualization aspect of this project.

This VPT website will condense 6 agencies' permitting process down to one platform. Members of the public will be able to see the Department of Environmental Quality, Virginia Department of Conservation and Recreation, Virginia Department of Health, Virginia Department of Transportation, Virginia Marine Resources Commission, and Virginia Energy permitting information via one website.

The ODGA team worked to replicate an existing template of Department of Environmental Quality (DEQ) permitting dashboards across different agencies that also handle permitting. The team worked to recreate a Tableau version of this system in Microsoft Power BI.

Currently, these dashboards are available to Commonwealth of Virginia agencies only. Visualizations help agencies have better visibility into their backlogs and progress in approving permits for Virginians.

ODGA involvement resulted in a cost avoidance of \$200,000 in external vendor costs, with costs to maintain these agreements reduced from \$17,260 in FY23 to \$7,226 in FY24..

## CITIZEN ENGAGEMENT

### OPEN DATA PORTAL

In a strategic move towards optimizing our data management infrastructure, ODGA successfully transitioned to a new open data platform, resulting in significant cost savings of \$325,000 annually. This transition not only underscores our commitment to innovation but also highlights our dedication to maximizing efficiency and reducing

operational overhead. Importantly, the new platform integrates all the same features as the previous portal, ensuring continuity and minimizing disruption while enhancing performance and scalability.

With over 800 datasets available to the public at the time, Virginia's Open Data Portal continues to expand and was used to power Virginia's Datathon in April 2023 and April 2024. Datathon teams accessed the open data to develop innovative solutions to address the event themes of "Unmasking Maternal Mortality" and "Boosting Virginia's Workforce" respectively. As of November 2024, there are now over 10,000 datasets hosted on the Virginia Open Data Portal.

The Virginia Open Data Portal has also been leveraged by the Virginia Department of State Police Data Analysis & Reporting Team to meet the requirements of the Community Policing Act. The legislation requires Virginia State Police (VSP) to develop and implement a uniform statewide database to collect motor vehicle and investigatory stop records and records of complaints alleging the use of excessive force for public consumption.

## DATATHON

The Virginia Datathon is a competition hosted by ODGA in which teams are given desensitized Commonwealth data to solve a challenge that Virginians are facing. The event, which started in 2014, continues bringing together state agencies and has expanded to include students, localities, non-profits, and the private sector to leverage technology and data to develop innovative solutions addressing complex problems. The Virginia Datathon is the first of its kind and the longest running state hackathon event.

The April 2024 Virginia Datathon theme was "Boosting the Virginia Workforce", a timely topic that aligned with the creation of a new workforce agency in the Commonwealth. Datasets for the event were provided by several agencies, including: The Virginia Employment Commission (VEC), the Virginia State Council for Higher Education in Virginia (SCHEV), The Department of Small Business and Supplier Diversity (SBSD), The Department of Human Resource Management (DHRM), Virginia Community Colleges System (VCCS), Virginia Works, The Department of Aging and Rehabilitative Services (DARS), and the Department of Education (DOE).

Participants of the event were from a diverse range of organizations, including the Virginia Department of Health (VDH), the City of Norfolk, The Department of Medical Assistance Services (DMAS), the Department of Criminal Justice Services (DCJS), JR Tucker High School, and various private sector organizations. The Virginia Datathon typically attracts many students from Virginia colleges and universities, and this year was no exception. Students from the College of William and Mary, Virginia Military Institute, George Mason University, and Virginia Commonwealth University participated in the event, and two of the winning teams were from the College of William and Mary. Solutions provided by participants were well thought out and covered a diverse range of topics. The top solutions that won the event were the following:

**1st Place:** A data informed employment notification by texting program. The team created a dashboard based on the "Virginia 2024 High Demand Occupations dashboard" that is specific to the Hampton Roads region and can be filtered by career cluster. It provides information such as job outlook and average salaries, as well as support services. The dashboard is mobile friendly and can be distributed through text. When new jobs arise, the office can automatically send out texts, delivered with a Python script, tailored with content specific to that job.

**2nd Place:** A "Commonwealth AI Career Hub Portal," a "one stop, get hired destination." The mobile app platform includes a centralized view of workforce development programs, skill-based trainings, and a mentor resource. Employers are also given access to available tax credits, candidate finder tools, and resources for hiring veterans.

**3rd Place:** WorkWatch VA, an interactive Power BI dashboard with three main components: Virginia Employment Statistics, Unemployment Rate forecast which offers predictive insights into the future unemployment rate, and a Policy Impact estimator which estimates how various policy decisions will impact unemployment.

**People's Choice:** A model was created based on labor force participation and demographics such as race. A solution to increase underrepresented populations includes measures such as: encouraging areas to become “Certified Welcoming” cities like Roanoke, removing immigration-related barriers to obtaining professional licenses, and invest in training for sectors that are forecasted to grow. The team also found that an increase in associate degrees results in a decrease in labor force participation. The solution to this is providing incentives to companies to hire those with associate degrees through tax breaks and subsidies, upskilling programs, and offering stackable credits at state institutions to allow students to apply credits from an associate degree to a bachelor's degree.

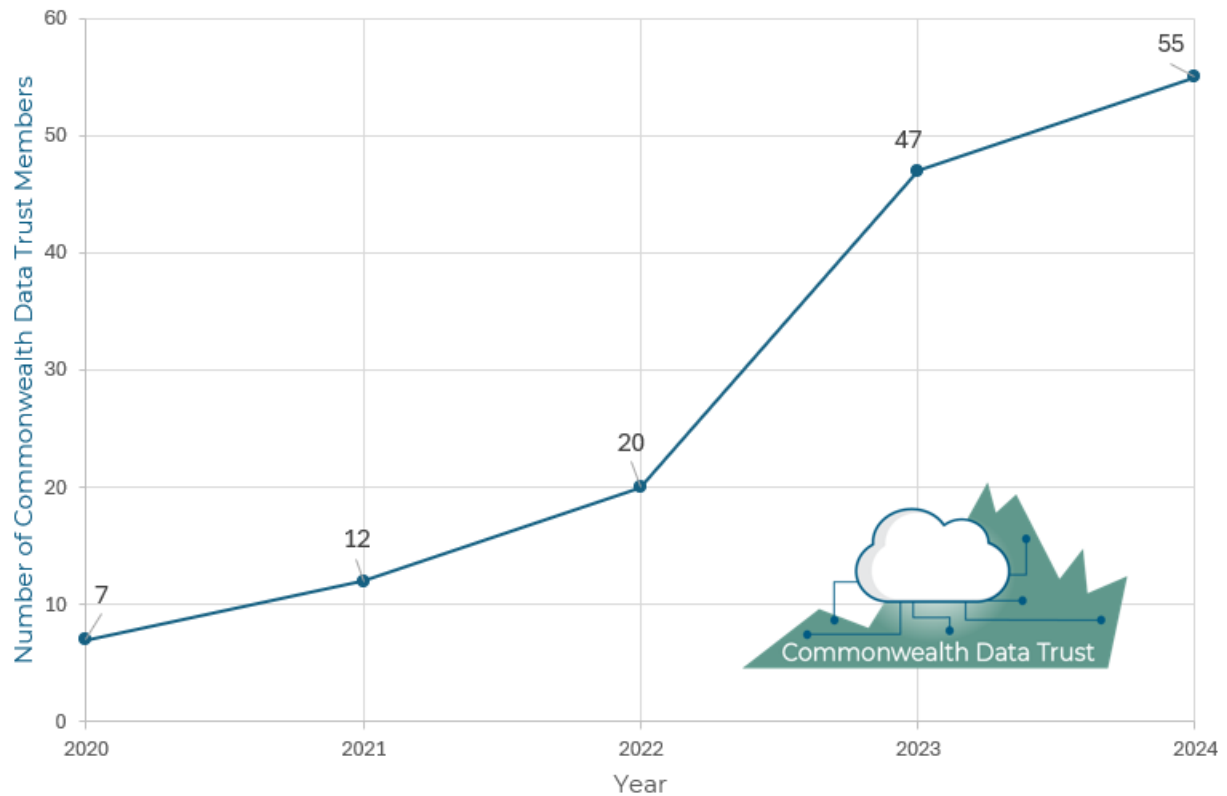
## COMMONWEALTH DATA TRUST

Key among ODGA's responsibilities is the stewardship of the Commonwealth Data Trust (CDT), an innovative platform fostering data exchange and analytics with stringent protocols for security, privacy, and confidentiality. In just 31 months, the CDT has grown exponentially from 13 to 55 members, encompassing data from diverse sources including state agencies, local governments, and public institutions of higher education. The Data Trust provides a scalable alternative to multiple “point-to-point” sharing, promotes trust among its members through common rules for data security, privacy, and confidentiality and reduces technical costs by onboarding to a single environment using standard National Information Exchange Model (NIEM) protocols.

As of November 2024, there are (55) Members of the Commonwealth Data Trust, which includes 31 Executive Branch Agencies and 17 localities.

In previous years, the Commonwealth Data Trust agreement process was managed manually through PDFs. The ODGA team is currently working on automating the agreement process. Signing of agreements will be handled through a web application and agencies will be able to share data with the trust through the web application. This application is estimated to reduce the agreement process from two to three days to fifteen minutes. ODGA predicts that the web application will be available to agencies in early 2025.

### Number of Commonwealth Data Trust Members by Year



#### Commonwealth Data Trust Members

*(Members added in 2024 are indicated in bold, Operation Bold Blue Line Members are indicated in italics)*

Chesterfield County, Virginia

Commonwealth of Virginia Homeland Security Division

Virginia Association of Recovery Residences

Virginia Community Colleges System

**Virginia Department for Aging and Rehabilitative Services**

Virginia Department of Aviation

Virginia Department of Behavioral Health and Developmental Services



Virginia Department of Blind and Vision Impaired
Virginia Department of Conservation and Recreation
Virginia Department of Criminal Justice Services
Virginia Department of Corrections
Virginia Department of Education
Virginia Department of Emergency Management
<b>Virginia Department of Environmental Quality</b>
Virginia Employment Commission
Virginia Department of Fire Programs
Virginia Department of Forensic Sciences
Virginia Department of Forestry
Virginia Department of Health
Virginia Department of Human Resource Management
Virginia Department of Juvenile Justice
Virginia Department of Labor and Industry
Virginia Department of Medical Assistance Services
<b>Virginia Department of Small Business and Supplier Diversity</b>
Virginia Department of Social Services
<b>Virginia Department of the Treasury</b>
Virginia Department of Veterans Services
Virginia Department of Wildlife Resources
<b>Virginia Economic Development Partnership</b>

<b>Virginia Information Technologies Agency</b>
Virginia Office of Children's Services
Virginia Office of Data Governance and Analytics
<b>Virginia Works</b>
<b>Office of the State Inspector General</b>
OMNI Institute
State Council for Higher Education for Virginia
Virginia Hospital and Healthcare Association
Virginia Innovation Partnership Corporation
Virginia State Police
Joint Commission on Health Care
City of Virginia Beach
Rappahannock Community Services Board
Virginia 529 College Savings Plan
Virginia Office of the State Inspector General
<i>Emporia Police Department</i>
<i>Martinsville Police Department</i>
<i>Hampton Police Department</i>
<i>Newport News Police Department</i>
<i>Lynchburg Police Department</i>
<i>Portsmouth Police Department</i>
<i>Petersburg Police Department</i>

<i>Roanoke Police Department</i>
<i>Danville Police Department</i>
<i>Chesapeake Police Department</i>
<i>Richmond Police Department</i>
<i>Norfolk Police Department</i>
<i>Hopewell Police Department</i>