# Chesapeake Bay Program – Indicators Standard Operating Procedures

*Last Updated: August 2026*

1. **Definitions**
   a) **Indicator** – A programmatically approved metric used to inform progress toward an Outcome or Outcome Target. A suite of metrics may be referred to as a single Indicator if the data source, goal measured, and analysis methodology are aligned. More description can be found in the Chesapeake Bay Program Indicators Framework.
   b) **Outlook** – The forecasted trajectory for whether the Chesapeake Bay Program (CBP) is on course to achieving the Outcome. An Outcome's Outlook may be classified as On Course, Off Course, Uncertain, or Completed. This information will be incorporated into the Outcome's progress page. An Outcome's Outlook is reviewed and updated when new data are available and progress is reported. When an Indicator has not been established for an Outcome, progress may be informed by other available metrics or assessments.

2. **Responsibilities and Roles**
   a) **Indicators Coordinator** – Responsible for overall coordination of all Chesapeake Bay Program Indicators, including developing guidance; briefing program groups; managing the update process; reviewing and approving Indicator data, methodologies, and analysis materials; coordinating with the Communications Team and Web Team; consulting on Indicator development; and providing updates to leadership.
   b) **Outcome Representative** – Responsible for the overall coordination of Indicator data collection and analysis, production and review of supporting documents (e.g., data file, Analysis and Methods document), and review and approval of web content. This role could be served by a Goal Team Coordinator, Workgroup Chair, or other designated lead.
   c) **ChesapeakeProgress Web Content Specialist** – Responsible for drafting and publishing the web content, which includes web text, data tables, and data figures. Uploads final documents for download from the Outcome page. This role includes coordinating with the Outcome Representative and Indicators Coordinator to review web content, and with the Communications Team for synchronizing the release of materials. Updates the ChesapeakeProgress home page to highlight recent Indicator updates.
   d) **Communications Team** – Responsible for coordinating press releases or blog posts related to an Indicator update or release. This role also includes consultation on communication strategy.
   e) **Geospatial Science and Applications Team (GSAT)** – Responsible for developing GIS materials for web content in coordination with the Outcome Representative and Web Content Specialist.

3. **Materials**
   a) **<u>ChesapeakeProgress</u>** – A CBP website that provides oversight and accountability toward the Outcomes of the *Chesapeake Bay Watershed Agreement*. Indicator information and status are primarily reported on Outcome-specific pages of ChesapeakeProgress.
   b) **Data File** – A data file accompanies each Indicator update to ensure transparency. The data file should contain a "Metadata" worksheet with essential metadata information for the data source and a "Summary" worksheet that summarizes the key data to be presented on ChesapeakeProgress. It may include both raw and summarized data, displayed in tables and charts as appropriate. In general, raw data should be included unless it is highly technical or sensitive. There should be enough detail for users to trace and, if needed, reproduce the transformations and calculations from raw to summary data with relative ease. The data should align with the metrics used to report progress toward the associated Outcome and/or Outcome Target(s). Data reported in this worksheet will be used to populate the associated Outcome page on ChesapeakeProgress. Additional worksheets in the data file may be used to organize and report supporting data, charts, calculations, and notes.
   c) **Analysis and Methods (A&M) document** – Each Indicator update must include an Analysis and Methods document explaining how data are collected, analyzed, interpreted, and communicated to ensure transparency and consistency. Outcome Representatives and subject-matter experts complete the document during an Indicator's first iteration, addressing analytical methods, trends, and data quality, and update it with each new data release. The document is posted with the data file, which contains more detailed metadata and reported metrics, on ChesapeakeProgress for internal and external audiences across the Chesapeake Bay Program.

4. **Annual Planning**

   Data collection and analysis may not always follow the same annual timeline. To help plan for the upcoming year's Indicator updates, the Indicators Coordinator will work with each Outcome Representative to confirm their estimated timing for delivery of materials and the desired release date. Planning should begin in January each year and will help establish the overall schedule for the Indicators, Web Team, and Communications Team.

5. **Workflow Summary**

   For a streamlined process, the following workflow allows appropriate near-term awareness for the Communications Team and for the Indicators Team to manage multiple indicator schedules. Generally, approximately one month of advance notice is helpful to review and confirm a communication strategy, and then once final draft materials are received from the Outcome Representative, an update can occur in 2-5 weeks depending on the condition of materials and ease of update. Updates may take longer if there is elevated interest in the data or Outcome status across the Chesapeake Bay Program. The table below shows a month of awareness and roughly a month for review and publishing, which is typical given syncing between multiple work schedules and individual availability.

| Action | Week 1 | Weeks 2-4 | Week 5 | Week 6 | Week 7 | Week 8 | Week 9 | Week 10 |
|---|---|---|---|---|---|---|---|---|
| 1 – Notify Indicators Coordinator | | | | | | | | |
| 2 – Determine Communication Needs | | | | | | | | |
| 3 – Review and Confirm Materials | | | | | | | | |
| 4 – Draft and Confirm Web Text | | | | | | | | |
| 5 – Final Publishing Coordination | | | | | | | | |

<u>Action 1 – Notify Indicators Coordinator</u>

- While draft materials are being prepared, the **Outcome Representative** notifies the **Indicators Coordinator** with an estimated timeline for the availability of a draft data file and A&M document. While timing is scoped (estimated month of data availability) at the beginning of each year, delays may occur.

<u>Action 2 – Determine Communication Needs</u>

- The **Indicators Coordinator** shares awareness with the **Web Content Specialist** and **Communications Team**, and together, determine whether the Indicator update to ChesapeakeProgress will also generate a blog post, press release or neither, which is handled by the **Communications Team**.

<u>Action 3 – Review & Confirm Materials</u>

- When drafts of the data file and A&M are ready for review, the **Outcome Representative** will submit these materials to the **Indicators Coordinator**, initiating the final steps before publication to ChesapeakeProgress.
  - The A&M document should be submitted with tracked changes from the previous update.
  - If the update has geospatial information, the **Web Content Specialist** will coordinate with the **GSAT**.
  - The **Outcome Representative** should be prepared to coordinate with all individuals who will review feedback from the **Indicators Coordinator** or **Web Content Specialist**. Correspondence should occur through a single representative – this helps version control and communication.
- The **Indicators Coordinator** performs a quality review of both the data file and A&M document using the Indicator QA Checklist (See Appendix A). If there are issues with or questions about the materials, the **Indicators Coordinator** will consult with the **Outcome Representative** (who coordinates with their colleagues separately) to resolve the need.

- Once the data file and A&M are considered complete, the **Indicators Coordinator** will share a clean version of the A&M, along with a single data file, with all relevant parties (**Outcome Representative, Web Content Specialist, Communications Team, etc.**).
- The **Indicators Coordinator** should use the following link to file all materials: 02_Indicator Update Materials (within the ABT/Accountability & Budget Team).

Action 4 – Draft & Confirm Web Content

- The **Indicators Coordinator** will schedule a meeting with the **Outcome Representative**, **Web Content Specialist**, and **Communications Team** to discuss key narrative takeaways, intended audiences, and other engagement needs that may influence web and communications content.
- The **Web Content Specialist** uses the data file and A&M to develop draft web content, including narrative text and relevant figures, tables, and captions. Any initial questions can be worked through with the **Indicators Coordinator**.
    - Once the draft content is ready, the **Web Content Specialist** shares with the **Outcome Representative** to address comments/questions and review for approval.
    - While materials are under review, the **Web Content Specialist** can begin drafting the update in the Content Management System (CMS) and coordinate with the **Communications Team** on a date of publishing.
    - Draft materials can also be shared with the **Communications Team** for preparation of any accompanying communication materials (press release, blog, etc.)
- When all comments/questions have been addressed and the materials approved, the **Web Content Specialist** can finalize materials in the CMS.

Action 5 – Final Publishing Coordination

- **Web Content Specialist** publishes web text, data file, A&M document and other supporting materials (e.g., charts, maps) and alerts the **Outcome Representative**, **Indicators Coordinator** and **Communications Team**.
    - As needed, publishing may occur in conjunction with any other communication materials.
- The **Indicators Coordinator** will alert the Accountability and Budget Team Lead, so they can disseminate the update through management channels. The **Communications Team** has mechanisms for disseminating across the program.

## Appendix A. Indicator QA/QC Checklist

**Excel Data File**

1. **General Requirements**
   - **a)** The file must contain a “Metadata” worksheet with required and applicable metadata.
   - b) The file contains a worksheet titled “ChesapeakeProgress Summary” for easy interpretation.
   - **c)** The file can be shared publicly with no private identifying information.
   - **d)** The file reflects any values that will be used in ChesapeakeProgress web text, tables, and/or charts (e.g., state totals, overall total, percentages).

2. **Organization**
   - **a)** Cells reference other cells and formulas as appropriate (e.g., not recalculating same data in two different places).
   - **b)** The file contains an appropriate amount of notation for the public to accurately interpret the information (e.g., “historic data” labels or “Read Me” tabs).
   - c) Summary tables are clearly formatted and derived from raw data in other tabs.

3. **Calculation**
   - **a)** Calculations reference appropriate cells (e.g., range included in the calculation for “Maryland total” includes all relevant Maryland values; percentage of Maryland school districts references districts in correct category and total number of Maryland districts).
   - b) Charts reference all relevant data ranges.
   - **c)** Check that no previous data has been dropped off.

**Analysis and Methods Document**

1. **Initial Review**
   - **a)** Data matches what is in data file.
   - **b)** Answers all questions.
   - **c)** References existing technical documentation as appropriate (does not recreate or reiterate this information).
   - **d)** All answers should be in plain English, but especially the Communicating the Data section. Is it easy for a member of the public to read and understand?

2. **Higher Level Review**
   - **a)** What has changed? Why has it changed? Does it make sense? Will it change how we communicate the Indicator on ChesapeakeProgress?
   - **b)** What’s missing? Should anything have changed that didn’t change?
   - **c)** Validate Outcome attainability language: is the classification of Outlook consistent with other messaging in the A&M?

**Web Text**

1. Review all referenced numbers to ensure they match Indicator documents.
2. Review Outlook language and ensure 1) the classification is correct and 2) the justification matches what is communicated in the data file.
3. Check all charts and tables to make sure they are updated with the correct data and labels.
4. What points are communicated in the main body text? Are these the main points for communicating progress for this Outcome, based on the story in the A&M?
5. Does the overall text read clearly? Is there redundancy that could be eliminated or reduced?