IT COLLECT, "How To" Series
The Data Quality Report

September

2023 v3.0

General Services Administration

Office of Government-wide Policy

DOCUMENT CHANGE RECORD

Version Number	Date	Description
1.0	September 2021	Created IT How-To Data Quality Report document outlining IT Collect data reports.
1.1	October 2021	Added additional summary information for Data Quality Report.
2.0	August 2022	Updated with new BY 2024 Statistics Reports.
3.0	September 2023	Updated with new BY 2025 Statistics Reports.

CONTENTS

WHAT IS THE IT COLLECT STATISTICS SERVICE?

The IT Collect Statistics service is a GET-only, multi-report mechanism that displays data quality, data completeness, data staleness, and other metrics within reports to agencies. This series will focus on the data quality report that allows users to better understand the composition of their investment data. Some portions of the data quality report contain their own sub-reports (Result Sets) that provide additional data visibility. The statistics service is made up of multiple distinct reports including (1) the Data Quality Report (2) the Active Risk Report (3) the TBM Discrepancy Report (4) the Portfolio Report and introducing in BY 2025 (5) the Missing System IDs Report.

DATA QUALITY REPORT

This collection reports on the quality/completeness of the data submitted to the IT Collect database for a given agency. These reports are designed to be viewed by agency end users via a data feed on the modernized IT Dashboard front-end.

Agencies and relevant ITPfM stakeholders can leverage the Data Quality Report to help ensure the completeness and validity of submitted ITPfM data to the IT Dashboard. The Data Quality Report provides a variety of metrics to help Agencies verify that they have submitted all relevant data points. For example, one such Data Quality Report check will highlight all investments that have not provided projects data. The Data Quality Report also serves to highlight data instances that potentially fall outside expected norms of ITPfM

data. An example of such a check would include highlighting new investments that contain PY or CY funding.

The Data Quality Report is designed to assist Agencies monitor their submitted data, and any Data Quality Report finding does not necessitate action on its own. Agencies are not obliged to take direct action solely to "resolve" Data Quality report findings. In other words, just because a data element is flagged in the Data Quality Report does not mean an Agency must or needs to "fix" the underlying data.

All reports apply to unretired UII's (isRetired = false) and non–Budget Authority Ledger Element Styles (ledgerElementStyle != "Budget Authority"). Below are the available filters, individual result sets, their subsets, and descriptions agencies will see in this report:

How to Query the Data Quality Report?

Filter	Description	Inputs
report	Required filter which allows users to designate which report to run	All available Result Sets outlined below
page	Specifies which page number a user wants to display. The first page will display 200 records, the second the next 200, and so on.	Integer value

BY 2025 Adjustments

- Rows highlighted in green have been added for BY 2025.
- IT Collect has reworked all missing ledger reports to simplify the reporting structure and reduce system burden. This refactoring will help the system accommodate the anticipated spike in ledger reporting due to Technical Solution reporting during BY 2025.
  - Impacted reports include: missingFundingSources, missingCostPools, missingITTowers.

DQR Result Set

Report	Sub–Report	*Criteria*	Reporting Fields
uIIsNotUpdatedCurrentBudgetYear	N/A	*UII that was not updated in the current budget year*	agencyId (service) agency currentUII
uIIsNotUpdatedCurrentTimePeriod	N/A	*UII that was not updated in the current budget year (denoted by the Time Period ID field)*	agencyId (service) agency currentUII
missingCioRatings	N/A	*UII's that do not have CIO Ratings and have investmentType = 01 or 05*	agencyId (service) agency currentUII
missingContracts	N/A	*UII's that do not have Contracts and have investmentType = 01, 02, or 05*	agencyId (service) currentUII
missingProjects	N/A	*UII's that do not have Projects and have investmentType = 01*	agencyId (service) currentUII
newServicesWithCYPYFunding	N/A	*UII's with CY or PY funding AND changeInStatus = 10 (New Investment)*	year (ledger) amount (ledger) agencyId (ledger) currentUII agency agencyId (service)
eliminatedInvestmentsWithCYBYFund ing	N/A	*UII's with CY or BY funding AND changeInStatus = 06, 07, 08, or 09 (Eliminated Investments)*	year (ledger) amount (ledger) agencyId (ledger) currentUII agency agencyId (service)
missingCostPools	missingAllCostPools	*UII's with no cost pools at all*	changeInStatus agencyId (service) currentUII

Report	Sub–Report	Criteria	Reporting Fields
	missingPrevious YearCostPools	*Existing UII's (changeInStatus != 10) missing PY cost pools*	agencyId (service) changeInStatus currentUII
	missingCurrentY earCostPools	*UII's that are not new or eliminated (changeInStatus != 10, 06, 07, 08, or 09) and are missing CY cost pools*	agencyId (service) changeInStatus currentUII
	missingBudgetY earCostPools	*UII's that are not eliminated (changeInStatus != 06, 07, 08, or 09) and are missing BY cost pools*	agencyId (service) changeInStatus currentUII
missingITTowers	missingAllITTow er s	*UII's with no IT towers at all*	changeInStatus agencyId (service) currentUII
	missingPrevious YearITTowers	*Existing UII's (changeInStatus != 10) missing PY IT towers*	agencyId (service) currentUII changeInStatus
	missingCurrentY earITTowers	*UII's that are not new or eliminated (changeInStatus != 10, 06, 07, 08, or 09) and are missing CY IT towers*	agencyId (service) currentUII changeInStatus
	missingBudgetY earITTowers	*UII's that are not eliminated (changeInStatus != 06, 07, 08, or 09) and are missing BY IT towers*	agencyId (service) currentUII changeInStatus
missingFundingSourc es	missingAllFundi ngSources	*UII's with no funding (henceforth derived from ledger records containing funding source data) at all*	changeInStatus agencyId currentUII
	missingPrevious YearFundingSou rces	*Existing UII's (changeInStatus != 10) missing PY funding*	agencyId (service) currentUII changeInStatus

Report	Sub-Report	Criteria	Reporting Fields
	missingCurrentYearFundingSources	*UII's that are not new or eliminated (changeInStatus != 10, 06, 07, 08, or 09) and are missing CY Funding Sources*	agencyId (service) currentUII changeInStatus
	missingBudgetYearFundingSources	*UII's that are not eliminated (changeInStatus != 06, 07, 08, or 09) and are missing BY Funding Sources*	agencyId (service) currentUII changeInStatus
missingTechincialSolutions	missingAllTechnicalSolutions	*Standard Investments with no technical solutions funding*	changeInStatus agencyId currentUII
	missingPreviousYearTechnicalSolutions	*Existing Standard Investments (changeInStatus != 10) missing PY technical solution funding*	changeInStatus agencyId currentUII
	missingCurrentYearTechnicalSolutions	*Standard Investments that are not new or eliminated (changeInStatus != 10, 06, 07, 08, or 09) and are missing CY technical solution funding*	changeInStatus agencyId currentUII
	missingBudgetYearTechnicalSolutions	*Standard Investments that are not eliminated (changeInStatus != 06, 07, 08, or 09) and are missing BY technical solutions funding*	changeInStatus agencyId currentUII
cioRatingsInRedOverThreeMonths	N/A	*UII's with a red CIO rating (cioRating = 1 or 2) for more than 90 days*	title(service) currentUII agencyId (service)

Report	Sub–Report	*Criteria*	Reporting Fields
cioRatingsInRedOverOneYear	N/A	*UII's with a red CIO rating (cioRating = 1 or 2) for more than 365 days*	title (service) currentUII agencyId (service) date (CIO rating) rating (CIO rating) agencyId (CIO rating)
missingOperationalAnalyses	N/A	*UII's that are missing operational analysis data and have investmentType = 01*	agencyId (service) currentUII
projectLifecycleLedgerExcess	N/A	*UII's where project lifecycle costs (projected total cost) exceed ledger lifecycle costs*	agencyId (service) currentUII title(service) projectLifecycleCost ledgerLifecycleCost
UIIsToBeRetired	N/A	*UII's that are eliminated (changeInStatus = 06, 07, 08, 09) and are not yet Retired (isRetired = false)*	changeInStatus currentUII title (service) agencyId (service)
majorInvestmentsMissingMetrics	N/A	*UIIs that do not have metrics data and have investmentType = 01*	agencyId (service) title (service) currentUII (service)
missingStrategicResultsMetrics	N/A	*UIIs with investmentType = 01 that do not have at least three isRetired = false metrics with performanceMeasurmentCategory = "Strategic and Business Results"*	agencyId (service) title (service) currentUII (service)

Report	Sub–Report	*Criteria*	Reporting Fields
missingStrategicResul tsMonthlyMetri cs	N/A	*Ulls with investmentType = 01 that do not have at least one isRetired = false metric with performanceMeasur mentCategory = "Strategic and Business Results" and reportingFrequency = "Monthly"*	agencyId (service) title (service) currentUll (service)
missingCustomerSati sfactionMetrics	N/A	*Ulls with investmentType = 01 that do not have at*	agencyId (service) title (service) currentUll (service)

Sample Result Sets

Here are sample Result Sets users will see within the Data Quality Report. Users can expect all Result Sets under the Data Quality Report to be displayed similarly to these two examples:

missingCioRatings

```
{
  "@context": "/contexts/DataQualityReport",
  "@id": "/v1/data-quality-report",
  "@type": "hydra:Collection",
  "hydra:member": [
    {
      "_id": "01F3DCAH5RB6K20DXZZFTHRDSV",
      "agency": "018",
      "agencyId": "string",
      "currentUII": "018-000000283"
    },
    {
      "_id": "01F3DCGJR3XJ70XH2JFR4G6N63",
      "agency": "018",
      "agencyId": "sring",
      "currentUII": "018-000000293"
    },
    {
      "_id": "01F3DNVCECAY700V68SJ9WSHT3",
      "agency": "018",
      "agencyId": "1string",
      "currentUII": "018-000000124"
    }
  ],
  "hydra:totalItems": 3,
  "hydra:view": {
    "@id": "/v1/data-quality-report?report=missingCioRatings",
    "@type": "hydra:PartialCollectionView"
  },
  "hydra:search": {
    "@type": "hydra:IriTemplate",
    "hydra:template": "/v1/data-quality-report{?report}",
    "hydra:variableRepresentation": "BasicRepresentation",
    "hydra:mapping": [
      {
        "@type": "IriTemplateMapping",
        "variable": "report",
        "property": null,
        "required": true
      }
    ]
  }
}
```

missingOperationalAnalyses

```
{
  "@context": "/contexts/DataQualityReport",
  "@id": "/v1/data-quality-report",
  "@type": "hydra:Collection",
  "hydra:member": [
    {
      "agencyId": "01F3BES0NQHJRHN5XNY0Q3HZR7",
      "currentUII": "018-000000003"
    },
    {
      "agencyId": "01F3BES0NW1NTS3WCRNQW5YHXG",
      "currentUII": "018-000000004"
    },
    {
      "agencyId": "01F3BES0P2FQW0M31W91YB1J88",
      "currentUII": "018-000000005"
    }
  ],
  "hydra:totalItems": 3,
  "hydra:view": {
    "@id": "/v1/data-quality-report?report=missingOperationalAnalyses",
    "@type": "hydra:PartialCollectionView"
  },
  "hydra:search": {
    "@type": "hydra:IriTemplate",
    "hydra:template": "/v1/data-quality-report{?report}",
    "hydra:variableRepresentation": "BasicRepresentation",
    "hydra:mapping": [
      {
        "@type": "IriTemplateMapping",
        "variable": "report",
        "property": null,
        "required": true
      }
    ]
  }
}
```

Further Information on Missing Ledger DQR Reports

As previously mentioned, the reporting format for the Missing Ledger DQRs was refactored for the four ledger reports: missingCostPools, missingITTowers, missingFudningSources, missingTechnicalSolutions. The first three reports existed in BY 2024, and the functionality remains unchanged. However, the response structure is updated for BY 2025 and is depicted below.

missingFundingSources

```
{
  "@context": "/contexts/DataQualityReport",
  "@id": "/v1/data-quality-report",
  "@type": "hydra:Collection",
  "hydra:member": [
    {
      "serviceId": "1693428894696EDA96A6B188A68696",
      "UII": "005-778821284",
      "changeInStatus": "10",
      "serviceName": "WIOA State Plan Portal",
      "missingAllFundingSources": false,
      "missingPreviousYearFundingSources": false,
      "missingCurrentYearFundingSources": true,
      "missingBudgetYearFundingSources": true
    },
  ],
  "hydra:totalItems": 1,
  "hydra:view": {
    "@id": "/v1/data-quality-report?report=missingFundingSources",
    "@type": "hydra:PartialCollectionView"
  },
  "hydra:search": {
    "@type": "hydra:IriTemplate",
    "hydra:template": "/v1/data-quality-report{?report}",
    "hydra:variableRepresentation": "BasicRepresentation",
    "hydra:mapping": [
      {
        "@type": "IriTemplateMapping",
        "variable": "report",
        "property": null,
        "required": true
      }
    ]
  }
}
```

missingCostPools

```
{
  "@context": "/contexts/DataQualityReport",
  "@id": "/v1/data-quality-report",
  "@type": "hydra:Collection",
  "hydra:member": [
    {
      "serviceId": "1693428894696EDA96A6B188A68696",
      "UII": "005-778821284",
      "changeInStatus": "10",
      "serviceName": "WIOA State Plan Portal",
      "missingAllCostPools": false,
      "missingPreviousYearCostPools": false,
      "missingCurrentYearCostPools": true,
      "missingBudgetYearCostPools": true
    }
  ],
  "hydra:totalItems": 1,
  "hydra:view": {
    "@id": "/v1/data-quality-report?report=missingCostPools",
    "@type": "hydra:PartialCollectionView"
  },
  "hydra:search": {
    "@type": "hydra:IriTemplate",
    "hydra:template": "/v1/data-quality-report{?report}",
    "hydra:variableRepresentation": "BasicRepresentation",
    "hydra:mapping": [
      {
        "@type": "IriTemplateMapping",
        "variable": "report",
        "property": null,
        "required": true
      }
    ]
  }
}
```

missingITTowers

```
{
  "@context": "/contexts/DataQualityReport",
  "@id": "/v1/data-quality-report",
  "@type": "hydra:Collection",
  "hydra:member": [
    {
      "serviceId": "1693428894696EDA96A6B188A68696",
      "UII": "005-778821284",
      "changeInStatus": "10",
      "serviceName": "WIOA State Plan Portal",
      "missingAllITTowers": false,
      "missingPreviousYearITTowers": false,
      "missingCurrentYearITTowers": false,
      "missingBudgetYearITTowers": true
    },
  ],
  "hydra:totalItems": 1,
  "hydra:view": {
    "@id": "/v1/data-quality-report?report=missingItTowers",
    "@type": "hydra:PartialCollectionView"
  },
  "hydra:search": {
    "@type": "hydra:IriTemplate",
    "hydra:template": "/v1/data-quality-report{?report}",
    "hydra:variableRepresentation": "BasicRepresentation",
    "hydra:mapping": [
      {
        "@type": "IriTemplateMapping",
        "variable": "report",
        "property": null,
        "required": true
      }
    ]
  }
}
```

ACTIVE RISK REPORT

This report dynamically finds UIIs with investmentType = 01 that cross a user-defined threshold of active risk area totals. Users can select whether to this report will return UIIs that are either tracking a number of Risk Areas above or below the user provided threshold. Agencies can leverage this report to locate UIIs that might have erroneously omitted Risk Areas. Or, Agencies could locate UIIs tracking an above average number of Risk Areas for a

give UII. Below are the available filters, individual result sets, and descriptions agencies will see in the report:

Filter	Description	Inputs
page	Specifies which page number a user wants to display. The first page will display 200 records, the second the next 200, and so on.	Integer value
activeRiskCountLess	Returns UIIs with a count of active Risk Areas less than the user provided value	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, or 13
activeRiskCountMore	Returns UIIs with a count of active Risk Areas more than the user provided value	0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, or 12

Result Set	Description
currentUII	currentUII of UII
title	Title of UII
agencyId	Agency provided unique identifier of UII
activeRiskCount	Total count of active risk areas for a given UII

TBM DISCREPANCY REPORT

This report displays a list of investments with either a cost pool or IT tower total for a given year that is greater than a plus or minus 5% delta than the funding amount total. All UII's displayed in this report are not retired (isRetired != false) and the funding amount totals do not include budget authority ledgers (ledgerElementStyle != "Budget Authority"). Below are the available filters, individual result sets, and descriptions agencies will see in the report:

Filter	Description	Inputs
page	Specifies which page number a user wants to display. The first page will display 200 records, the	Integer value

	second the next 200, and so on.	

Result Set	Description
funding_total	Total Funding amount ($M) for a given year
cost_pool_total	Total Cost Pool amount ($M) for a given year
cost_pool_deviation	% Difference between Cost Pool total and Funding total for a given year
it_tower_total	Total IT Tower amount ($M) for a given year
it_tower_deviation	% Difference between IT Tower total and Funding total for a given year

- Below is a sample report users will see for the TBM Discrepancy Report. Users can expect their report to be displayed in a similar way:

```json
{
  "@context": "/contexts/TBMDiscrepancyReport",
  "@id": "/v1/tbm-discrepancy-report",
  "@type": "hydra:Collection",
  "hydra:member": [
    {
      "018-000000000": {
        "2019": {
          "funding_total": 12.907,
          "cost_pool_total": 27.967,
          "cost_pool_deviation": 1.166809,
          "it_tower_total": 0,
          "it_tower_deviation": -1
        },
        "2020": {
          "funding_total": 5.57,
          "cost_pool_total": 0.6970000000000001,
          "cost_pool_deviation": -0.874865,
          "it_tower_total": 0,
          "it_tower_deviation": -1
        },
        "2021": {
          "funding_total": 50.14,
          "cost_pool_total": 17.869,
          "cost_pool_deviation": -0.643618,
          "it_tower_total": 58.183,
          "it_tower_deviation": 0.160411
        }
      }
    }
  ],
  "hydra:totalItems": 1
}
```

PORTFOLIO REPORT

This report displays all non-retired (isRetired = false) investment-level UII's for each time period. This report is intended for agencies to see how many Services they have submitted across their portfolio. Here is an example of this report and available filters:

Filter	Description	Inputs
report	Only one result set is available for the Portfolio Report	PortfolioReport

page	Specifies which page number a user wants to display. The first page will display 200 records, the second the next 200, and so on.	Integer value

```
{
    "portfolioReport": {
        "TimePeriod20211": {
            "018": [
                "018-000000000",
                "018-000000001",
                "018-000000002",
                "018-000000003",
                "018-000000004",
                "018-000000005"
            ]
        },
        "TimePeriod20212": {
            "018": [
                "018-000000000",
                "018-000000001",
                "018-000000002",
                "018-000000003",
                "018-000000004",
                "018-000000005"
            ]
        }
    }
}
```

MISSING SYSTEM IDS REPORT

This report will flag all CDM System IDs that are NOT mapped against an active ITPfM investment (service). As part of the BY 2025 reporting requirements, agencies are now mandated to map their entire CDM System ID list against an ITPfM investment. This new IT Collect report will help agencies monitor their compliance with this new reporting requirements. Below are the available filters, individual result sets, and descriptions agencies will see in the report:

Result Set	Description
agency	Agency/Agencies (depending on response for single agency user vs. ITCAdmin)
Missing CDM System IDs	List is provided with missing Ids
No Missing CDM System IDs	Returns when all Ids are present

```json
{
  "@context": "/contexts/DataQualityReport",
  "@id": "/v1/data-quality-report",
  "@type": "hydra:Collection",
  "hydra:member": [
    {
      "agency": {
        "018": {
          "Missing CDM System IDs": [
            "018EDU11614-FSS-HVDF-T963",
            "018EDU6290-4Z1-ZGQL-L81C",
            "018EDU23313-YH2-XO9Z-MOVC"
          ]
        }
      }
    }
  ],
  "hydra:totalItems": 1,
  "hydra:view": {
    "@id": "/v1/data-quality-report?report=missingSystemIDs",
    "@type": "hydra:PartialCollectionView"
  }
}
```