

Bureau of Labor Statistics > Developers

# BLS Public Data API Signatures (Version 2.0)

The BLS Public Data API utilizes the following three signatures:

- Single Series
- Multiple Series
- One or More Series with Optional Parameters
- Latest Series
- Popular Series
- All Surveys
- Single Survey

All signatures must include an HTTP type, a RESTful URL, and at least one series ID. The series ID(s) can include an underscore (\_), dash (-) and hash (#), but must not include lower case letters or special characters. All requests specifying years must include a four-digit start and end year in numeric format (e.g. YYYY).

The following are sample responses for each of API signature with added white spaces for easier readability.

## Single Series

Use this signature to retrieve data for a single time series for the past three years. Be sure to include the specific series ID at the end of the URL. Parameters are optional.:

HTTP Type: GET

URL (JSON): https://api.bls.gov/publicAPI/v2/timeseries/data/URL for Excel output: https://api.bls.gov/publicAPI/v2/timeseries/data/.xlsx

**Payload:** series\_id

**Example Payload:** LAUCN0400100000000005

#### Sample JSON Response:

```
1
       "status": "REQUEST SUCCEEDED",
2
 3
      "responseTime": 16,
 4
      "message": [
 5
 6
 7
      "Results": [
8
 9
           "series": [
10
11
               "seriesID": "LAUCN040010000000005",
12
               "data": [
13
14
                    "year": "2013",
15
                    "period": "M11",
16
                    "periodName": "November",
17
                    "value": "16393",
18
                    "footnotes": [
19
20
                         "code": "P",
21
22
                         "text": "Preliminary."
23
24
25
26
27
                    "year": "2013",
28
                    "period": "M10",
29
                    "periodName": "October",
30
                    "value": "16536",
31
                    "footnotes": [
32
34
35
36
37
38
39
40
41
```

## Multiple Series

Use this signature to retrieve data for more than one timeseries for the past three years. Registered users can include up to 50 series IDs, each separated with a comma, in the body of a request.

HTTP Type: POST

URL (JSON): https://api.bls.gov/publicAPI/v2/timeseries/data/URL (Excel): https://api.bls.gov/publicAPI/v2/timeseries/data.xlsx

**Header:** Content-Type= application/json

**Payload (JSON):** {"seriesid":["Series1",..., "SeriesN"], "startyear":"yearX", "endyear":"yearY",

"catalog":true|false, "calculations":true|false, "annualaverage":true|false, "aspects":true|false,

Example Payload: {"seriesid":["LAUCN04001000000005", "LAUCN04001000000006",

"OEUN000000056--5747213213"]}

#### **Sample Response:**

```
1
2
      "status": "REQUEST SUCCEEDED",
3
      "responseTime": 37,
4
      "message": [],
5
      "Results": [
 6
 7
           "series": [
 8
9
               "seriesID": "LAUCN040010000000005",
10
               "data": [
11
12
                   "year": "2013",
13
                   "period": "M11",
14
                    "periodName": "November",
15
                   "value": "16393",
16
                   "footnotes": [
17
18
                         "code": "P",
19
                         "text": "Preliminary."
20
21
22
                   ],
23
24
25
               "seriesID": "LAUCN040010000000006",
26
               "data": [
27
28
                   "year": "2013",
29
                   "period": "M11",
30
                   "periodName": "November",
31
                   "value": "20155",
32
                    "footnotes": [
33
34
                        "code": "P",
35
                        "text": "Preliminary."
36
37
                    ],
38
39
```

HTTP Type: POST

URL (JSON):https://api.bls.gov/publicAPI/v2/timeseries/data/URL (Excel):https://api.bls.gov/publicAPI/v2/timeseries/data.xlsxHeader:Content-Type=application/x-www-form-urlencoded

**Payload:** seriesid=series1,series2 ...

Example Payload without Parameters: seriesid=0EUN000000056--5747213213,LUU0202891000,

OEUN000000056--5747213213

**Example Payload with Parameters:** seriesid=OEUN000000056--5747213213,LUU0202891000,

OEUN000000056--5747213213

& catalog = true & startyear = 2010 & endyear = 2014

 $\& calculations = \verb|true\&| annual average = \verb|true\&| aspects = \verb|true|$ 

### **Sample of a JSON Response:**

```
1
      "status": "REQUEST_SUCCEEDED",
2
3
      "responseTime": 37,
      "message": [],
4
5
      "Results": [
6
 7
           "series": [
8
 9
               "seriesID": "LAUCN040010000000005",
10
               "data": [
11
12
                   "year": "2013",
13
                   "period": "M11",
14
```

```
15
                    "periodName": "November",
16
                    "value": "16393",
17
                    "footnotes": [
18
19
                         "code": "P",
20
                         "text": "Preliminary."
21
22
                    ],
23
24
25
               "seriesID": "LAUCN040010000000006",
26
               "data": [
27
28
                    "year": "2013",
29
                    "period": "M11",
30
                    "periodName": "November",
31
                    "value": "20155",
32
                    "footnotes": [
33
34
                        "code": "P",
35
                        "text": "Preliminary."
36
37
38
                     ],
39
```

## One or More Series with Optional Parameters

Use this signature to retrieve data for one or more timeseries within a set time frame of up to 20 years. This signature also provides the option of retrieving calculations, annual averages, aspects, and catalog data. To retrieve these optional parameters, users must include their assigned registration key. Unless otherwise specified, the catalog, calculations, annual average and aspects values will default to false.

Users should also include at least one series ID, the start year, and the end year in the body of the request. If you include multiple series IDs, be sure to separate each with a comma.

```
HTTP Type:
                              POST
URL:
                              https://api.bls.gov/publicAPI/v2/timeseries/data/
                              https://api.bls.gov/publicAPI/v2/timeseries/data/
                              URL with parameters (JSON):
                              catalog=true&startyear=2010&endyear=2014&calculations=true &annualaverage=true&aspects=true
                              https://api.bls.gov/publicAPI/v2/timeseries/data/
catalog=true&startyear=2010&endyear=2014&calculations=true&annualaverage=true&aspects=true
                              JSON Payload:
Payload:
                              {"seriesid":["Series1",..., "SeriesN"],
                               startyear":"yearX",
                              "endyear":"yearY",
"catalog":true|false,
                              "calculations":true|false,
                              "annualaverage":true|false,
                              "aspects":true|false,
                              {"seriesid":["WMU00140201020000001300002500", "WMU00140201020000001300002500"], "startyear":"2018",
Example Payload:
                              "endyear": "2018", "catalog": true,
                              "calculations":true, "annualaverage":true, "aspects":true,
                              }
                               \{ "seriesid": ["WMU00140201020000001300002500", "WMU00140201020000001300002500"], \\
Example Payload with Parameters:
                                               "endyear": "2018", "catalog": true,
                              "startyear":"2018",
                              "calculations":true, "annualaverage":true, "aspects":true,
```

### **Sample Response:**

```
1
2
     "status": "REQUEST_SUCCEEDED",
3
      "responseTime": 706,
 4
      "message": [],
5
      "Results": [
 6
7
           "series": [{
8
            "seriesID": "WMU00140201020000001300002500",
9
            "catalog": {
10
              "series title": "Average hourly wage for business and financial operations occupations, full-time, in Bloo
11
              "series id": "WMU00140201020000001300002500",
12
              "seasonality": "Not Seasonally Adjusted",
```

```
13
               "survey name": "Modeled Wage Estimates",
14
               "survey_abbreviation": "WM",
15
               "measure_data_type": "Average Hourly Wage",
16
               "commerce_industry": "All industries",
17
               "occupation": "Business and Financial Operations Occupations",
18
               "occupation_work_class": "Civilian workers",
19
               "area": "Bloomington, IN"
20
21
             "data": [{
22
               "year": "2018",
23
               "period": "A01",
24
               "periodName": "Annual",
25
               "latest": "true",
26
               "value": "30.71",
27
               "aspects": [{
28
                 "name": "Relative Standard Error",
29
                 "value": "1.9",
30
                 "footnotes": [{}]
31
32
               }],
33
               "footnotes": [{}]
34
            } ]
35
           },
36
37
```

## **Latest Series Data**

Use this signature to retrieve the most recent data point for a given BLS series ids.

HTTP Type: GET

**URL (JSON):** https://api.bls.gov/publicAPI/v2/timeseries/data/

Parameters: series\_id, latest

Example URL: https://api.bls.gov/publicAPI/v2/timeseries/data/LAUCN04001000000005?latest=true

#### **Sample JSON Response:**

```
1
2
       "status": "REQUEST SUCCEEDED",
       "responseTime":253,
3
4
       "message":[],
5
       "Results": {
 6
           "series": [
7
8
                 "seriesID": "LAUCN04001000000005",
 9
                 "data":[
10
11
                      "year": "2013",
12
                      "period": "M11",
13
                      "periodName": "November",
14
                      "latest": "true",
15
                      "value": "16393",
16
                      "footnotes": [
17
18
                           "code": "P",
19
                           "text": "Preliminary."
20
21
22
23
                 } ]
24
           ]
25
26
```

## Popular Series

Use this signature to retrieve a list of series IDs for the 25 most popular BLS and survey-specific series. Parameters for retrieving series IDs for survey-specific series are optional.

**HTTP Type:** GET

**URL (JSON):** https://api.bls.gov/publicAPI/v2/timeseries/popular **Example URL without Parameters:** https://api.bls.gov/publicAPI/v2/timeseries/popular

## **Sample JSON Response:**

```
{"status": "REQUEST SUCCEEDED", "responseTime": 29, "message": [], "Results": {
2
    "series":
3
   [{"seriesID":"LNS14000000"},
    {"seriesID":"CUUR0000SA0"},
   {"seriesID":"CES0000000001"},
   {"seriesID":"LNS14000006"},
    {"seriesID":"CUSR0000SA0"},
8
    {"seriesID":"LNS11300000"},
    {"seriesID":"CUUR0000SA0L1E"},
10
```

```
{"seriesID":"CES300000001"},
11
    {"seriesID":"CES0500000003"},
12
   {"seriesID":"LNU04000000"},
13
14
   {"seriesID":"PCU327320327320"},
15
    {"seriesID":"PCU33312033312014"},
16
    {"seriesID":"LNS12000000"},
17
    {"seriesID":"CUSR0000SA0L1E"},
18
    {"seriesID":"CUUR0000SAM1"},
19
    {"seriesID": "CUUR0000SEMC01"},
20
    {"seriesID":"LNS12300000"},
21
    {"seriesID":"LNS12035019"},
22
    {"seriesID":"CUUR0000SEMC"},
23
    {"seriesID":"CUUR0000SS5702"},
24
    {"seriesID": "CUUR0000SS5703"},
25
    {"seriesID":"CUUR0000SEMC02"},
26
    {"seriesID":"CES0500000001"},
27
    {"seriesID":"CUUR0100SEMC"},
28
    {"seriesID":"CUUR0100SAM1"}]
```

**Parameters:** survey

**Example URL with Parameters:** https://api.bls.gov/publicAPI/v2/timeseries/popular?survey=LA

#### **Sample JSON Response:**

```
{"status":"REQUEST_SUCCEEDED","responseTime":38,"message":[],"Results":{
 3
    [{"seriesID":"LASST060000000000003"},
   {"seriesID":"LASST260000000000003"},
 5
    {"seriesID":"LASST480000000000003"},
 6
    {"seriesID":"LASST340000000000003"},
    {"seriesID":"LASST120000000000003"},
 8
    {"seriesID":"LASST360000000000003"},
    {"seriesID":"LASST420000000000003"},
10
    {"seriesID":"LASST210000000000003"},
11
    {"seriesID":"LASST080000000000003"},
12
    {"seriesID":"LASST370000000000003"},
13
    {"seriesID":"LASST180000000000003"},
14
    {"seriesID":"LASST390000000000003"},
15
    {"seriesID":"LASST5500000000000003"},
16
    {"seriesID":"LASST170000000000003"},
17
    {"seriesID":"LASST010000000000003"},
18
    {"seriesID":"LASST130000000000003"},
19
    {"seriesID":"LASST040000000000003"},
20
    {"seriesID":"LASST280000000000003"},
21
22
    {"seriesID":"LASST510000000000003"},
23
    {"seriesID":"LASST530000000000003"},
24
    {"seriesID":"LASST250000000000003"},
25
    {"seriesID":"LASST270000000000003"},
    {"seriesID":"LASST290000000000003"},
27
    {"seriesID":"LASST320000000000003"},
28
    {"seriesID":"LASST470000000000003"}]
29
```

## All Surveys

Use this signature to retrieve a list of all BLS surveys.

HTTP Type: GET

URL (JSON): https://api.bls.gov/publicAPI/v2/surveys

## Sample JSON Response:

```
2
             "status": "REQUEST SUCCEEDED",
3
             "responseTime":424,
 4
             "message":[],
5
             "Results": {
 6
             "survey": [
7
 8
             "survey abbreviation": "AP",
9
             "survey name": "Consumer Price Index - Average Price Data"
10
11
12
             "survey_abbreviation": "BD",
13
             "survey name": "Business Employment Dynamics"
14
15
16
             "survey abbreviation": "BG",
17
             "survey name": "Collective Bargaining Agreements-State and Local Government"
18
19
20
             "survey abbreviation": "BP",
21
22
             "survey_name": "Collective Bargaining Agreements-Private Sector"
23
```

```
24
25
```

## Single Survey

Use this signature to retrieve the metadata associated with a single BLS survey. Be sure to include the specific survey abbreviation.

**HTTP Type:** GET

**URL (JSON):** https://api.bls.gov/publicAPI/v2/surveys/

Survey abbreviation Payload:

Example Payload: TU

### **Sample JSON Response:**

```
1
 2
             "status": "REQUEST_SUCCEEDED",
 3
             "responseTime":46,
 4
             "message":[],
 5
             "Results":{
 6
             "survey": [{
 7
             "survey_name":"American Time Use",
 8
             "survey_abbreviation":"TU",
 9
             "allowsNetChange": "false",
10
             "allowsPercentChange":"false",
11
             "hasAnnualAverages":"false"
12
             } ]
13
14
15
```

To help you get started, sample code for some of the most popular programming languages has been written:

#### **API Version 2.0 API Version 1.0**

```
Java
   <u>Java</u>
                             PHP
   <u>PHP</u>
   <u>Python</u>
                             Python

    <u>R</u>

    <u>R</u>

    Ruby/Ruby on Rails
    Ruby/Ruby on Rails
```

SAS

<u>Unix Command Line</u>
<u>Unix Command Line</u>

Last Modified Date: October 5, 2020

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