

# Guide to the ACS API Updates to Character and Numeric Data Variables

The American Community Survey (ACS) Detailed Tables and Data Profile estimates in the Census API are being converted to be consistent in the treatment of character and numeric data. Existingly, Detailed Tables only have numeric values and are missing the character values in the API, while Data Profiles have character values in place of numeric values, where applicable. In the new format, ACS will have both numeric and character data in the API in a consistent format for all data products.

## Existing Format Data in API

Data Product	Format of data in API
Detailed Table	Numeric data
Data Profile	Character data

In order to make the data consistent with other surveys and datasets, ACS will be adding in special variables just for character data and moving the numeric data to the existing variables. The new character variables will have the same name as existing numeric variables but with an "A" on the end.

*Note: The character data is only present in the API if character data exist and should always be used for display purposes in place of numeric data.*

## Example of New Format of Data Profile (DP02) in API

Characteristics	DP02_0001E	DP02_0001EA
Format	Numeric	Character
New/Existing	Existing	New

## Data Profile example using My Congressional Districts

Below is an example using My Congressional Districts which sources Data Profiles that will be changing in the new by moving the existing character data into the new API variables that end with an "A".

## Existing API example using ACS data profile - My Congressional District

The screenshot shows the 'My Congressional Districts' interface. At the top, there are two dropdown menus: '1 Wyoming' and '2 Congressional District (At Large)'. Below these are navigation icons for 'People', 'Workers', 'Housing', 'Socio-Economic', 'Education', and 'Business'. The main content area features a map of Wyoming with a yellow highlight over the 'One At Large' district. To the right of the map is a data profile for 'Congressional District (At Large), Wyoming' with the source '2015 American Community Survey 1-Year Estimates'. The profile includes a table with the following data:

Sex and Age	Estimate
Total population	586,107 (*****)
Male	295,102 (+/-2,375)
Female	291,005 (+/-2,375)

## Existing example

	Estimates	Margin of Error
<b>SEX AND AGE</b>		
Total population	DP05_0001E	DP05_0001M
Male	DP05_0002E	DP05_0002M
Female	DP05_0003E	DP05_0003M

Character value

## Existing example API call and results for selected variables for Wyoming Congressional District (At Large)

### call

[https://api.census.gov/data/2015/acs1/profile?get=DP05\\_0001E,DP05\\_0002E,DP05\\_0003E,DP05\\_0001M,DP05\\_0002M,DP05\\_0003M&for=congressional+district:00&in=state:56](https://api.census.gov/data/2015/acs1/profile?get=DP05_0001E,DP05_0002E,DP05_0003E,DP05_0001M,DP05_0002M,DP05_0003M&for=congressional+district:00&in=state:56)

### results

```
[["DP05_0001E","DP05_0002E","DP05_0003E","DP05_0001M","DP05_0002M","DP05_0003M","state","congressional district"],
["586107","295102","291005","*****","2375","2375","56","00"]]
```

## New changes in API example using ACS data profile - My Congressional District

**Congressional District (At Large), Wyoming**  
Source: 2015 American Community Survey 1-Year Estimates

Sex and Age	Estimate
Total population	586,107 (*****)
Male	295,102 (+/-2,375)
Female	291,005 (+/-2,375)

## New example sourcing document

	Estimates	Margin of Error
<b>SEX AND AGE</b>		
Total population	DP05_0001E (DP05_0001EA)	DP05_0001M(DP05_0001MA)
Male	DP05_0002E (DP05_0002EA)	DP05_0002M(DP05_0002MA)
Female	DP05_0003E (DP05_0003EA)	DP05_0003M(DP05_0003MA)

Character value

## New example API call and results for selected variables for Wyoming Congressional District (At Large)

### call

[https://api.census.gov/data/2015/acs/acs1/profile?get=DP05\\_0001E,DP05\\_0002E,DP05\\_0003E,DP05\\_0001M,DP05\\_0002M,DP05\\_0003M&for=congressional+district:00&in=state:56](https://api.census.gov/data/2015/acs/acs1/profile?get=DP05_0001E,DP05_0002E,DP05_0003E,DP05_0001M,DP05_0002M,DP05_0003M&for=congressional+district:00&in=state:56)

### results

```
[["DP05_0001E", "DP05_0002E", "DP05_0003E", "DP05_0001M", "DP05_0002M", "DP05_0003M", "state", "congressional district"], ["586107", "295102", "291005", "-555555555", "2375", "2375", "56", "00"]]
```

## New example API annotation calls and annotation results for selected variables for Wyoming Congressional District (At Large)

### call

[https://api.census.gov/data/2015/acs/acs1/profile?get=DP05\\_0001EA,DP05\\_0002EA,DP05\\_0003EA,DP05\\_0001MA,DP05\\_0002MA,DP05\\_0003MA&for=congressional+district:00&in=state:56](https://api.census.gov/data/2015/acs/acs1/profile?get=DP05_0001EA,DP05_0002EA,DP05_0003EA,DP05_0001MA,DP05_0002MA,DP05_0003MA&for=congressional+district:00&in=state:56)

### results

```
[["DP05_0001EA", "DP05_0002EA", "DP05_0003EA", "DP05_0001MA", "DP05_0002MA", "DP05_0003MA", "state", "congressional district"], ["", "", "", "*****", "", "", "56", "00"]]
```

## Existing API example using ACS Detailed Tables

Charles County, MD

Name	Estimate (MoE +/-)
Total population	152,754 (0)
Percent 18 years and over	74.8% (0.0)
Percent under 5 years	6.0% (0.0)
Percent under 18 years	25.2% (0.0)

	Estimate	Margin of Error
<b>SEX AND AGE</b>		
Total population	B01001_001E	B01001_001M

### call

[https://api.census.gov/data/2015/acs5?get=NAME,B01001\\_001E,B01001\\_001M&for=county:017&in=state:24](https://api.census.gov/data/2015/acs5?get=NAME,B01001_001E,B01001_001M&for=county:017&in=state:24)

### results

```
[["NAME", "B01001_001E", "B01001_001M", "state", "county"],  
["Charles County, Maryland", "152754", "0", "24", "017"]]
```

## New API example using ACS Detailed Tables

Charles County, MD

Name	Estimate (MoE +/-)
Total population	152,754 (0)
Percent 18 years and over	74.8% (0.0)
Percent under 5 years	6.0% (0.0)
Percent under 18 years	25.2% (0.0)

	Estimate	Margin of Error
<b>SEX AND AGE</b>		
Total population	B01001_001E (B01001_001EA)	B01001_001M (B01001_001MA)

### call

[https://api.census.gov/data/2015/acs/acs5?get=NAME,B01001\\_001E,B01001\\_001M&for=county:017&in=state:24](https://api.census.gov/data/2015/acs/acs5?get=NAME,B01001_001E,B01001_001M&for=county:017&in=state:24)

### results

```
[["NAME","B01001_001E","B01001_001M","state","county"],  
["Charles County, Maryland","152754","-555555555","24","017"]]
```

*Annotation API results*

### call

[https://api.census.gov/data/2015/acs/acs5?get=NAME,B01001\\_001EA,B01001\\_001MA&for=county:017&in=state:24](https://api.census.gov/data/2015/acs/acs5?get=NAME,B01001_001EA,B01001_001MA&for=county:017&in=state:24)

### results

```
[["NAME","B01001_001EA","B01001_001MA","state","county"],  
["Charles County, Maryland",",", "*****", "24", "017"]]
```