



sadā śiva samāramabhbāṁ śaṅkarācārya madhyamām..
asmadācārya paryantām vande guru paramparām..

Salutation to the lineage starting with lord Sadasiva, with Adi Sankara in the middle and continuing up to my immediate teacher.

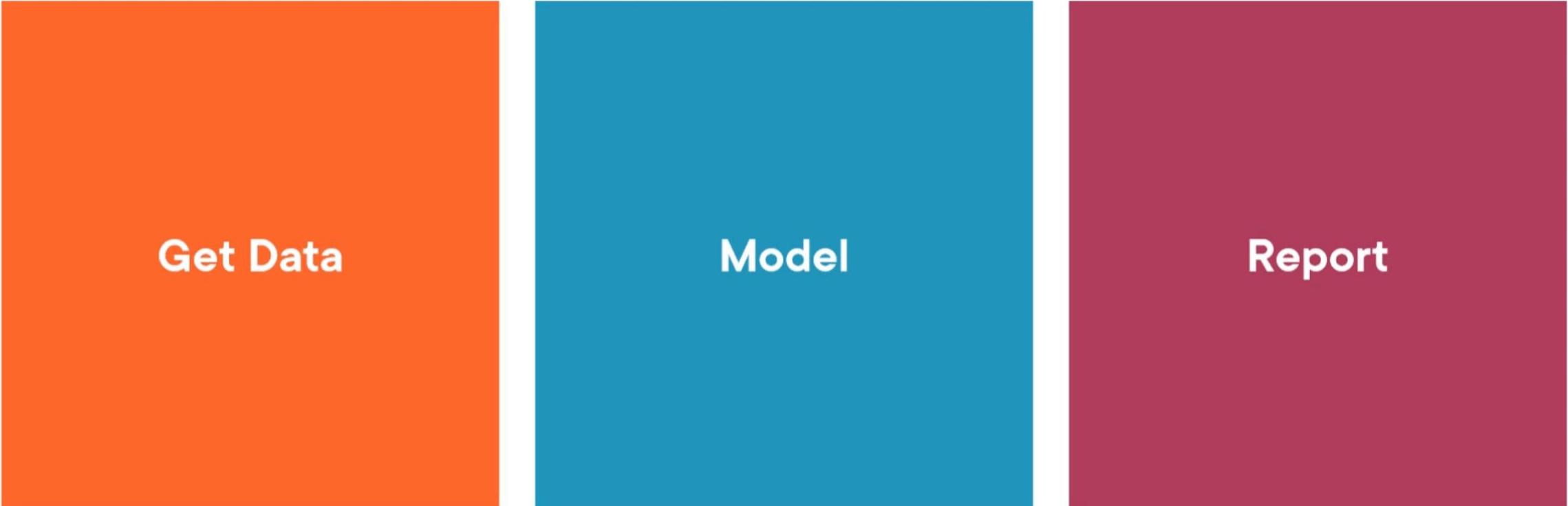


Power BI

Transforming Data

- Transforming Data
- Renaming Queries
- Appending Queries
- Grouping Queries
- Promoting Headers
- Fixing Column Metadata
- Filtering Rows
- Eliminating Columns
- Merging Queries
- Adding Columns by Splitting Text
- Adding Columns by Splitting xml
- Adding Columns for sorting
- Disabling the Data Load for Queries

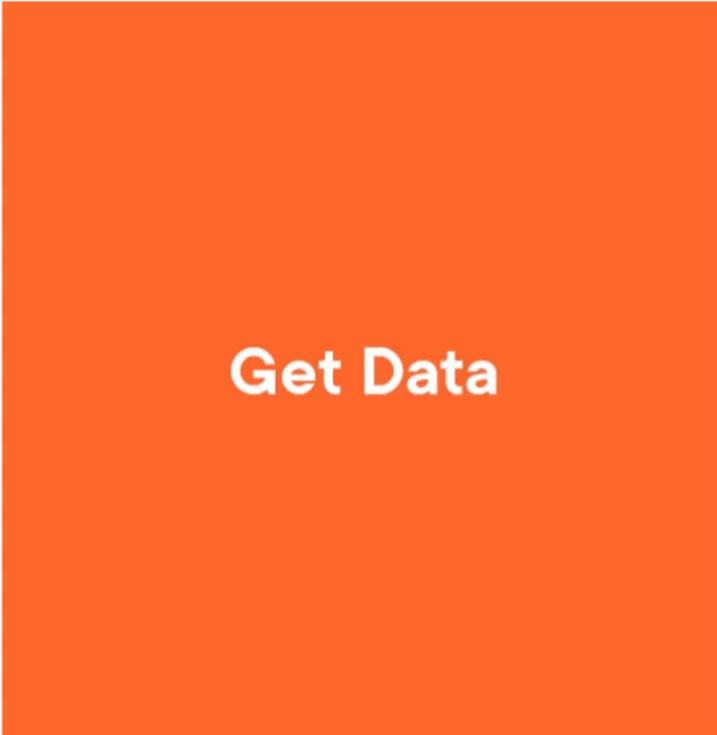
Power BI Development Workflow



Get Data

Model

Report



Get Data



Globomantics data assessment
Transformation tasks

Data Assessment

Customer

zcta_place_rel_10

geography
template

Median
Groups

g20141ca

E

getting-started-power-bi-data

Sales

g20141wa

Globomantics Data Assessment

Rename queries

Customer

Location

Geography

**Median
Groups**

CA Geo

**Survey
Headers**

Survey

Sales

WA Geo

Demo



Rename queries

File Home Insert Modeling View Help

Cut Paste Copy Format painter Clipboard

Get data v Excel Power BI datasets SQL Server Enter data Dataverse Recent sources v

Transform data Refresh data New visual Text box More visuals v

New measure Quick Sensitivity (preview) v Publish Share

Transform data Data source settings Edit parameters Edit variables

Add data fields here

Filters on all pages Add data fields here

Values Add data fields here

Drill through Cross-report Off Keep all filters

Build visuals with your data
Select or drag fields from the Fields pane onto the report canvas.

Customer E g20141ca g20141or g20141wa geographytemplate getting-started-power... Median Groups Sales zcta_place_rel_10

Search

Page 1 +

Globomantics Customer Analysis - Power Query Editor

File Home Transform Add Column View Tools Help

Close & Apply New Recent Enter Data Data source settings Manage Parameters Refresh Preview Advanced Editor Manage Data Type: Whole Number Use First Row as Headers Replace Values Close New Query Data Sources Parameters Sort Split Column Group By Transform Combine Text Analytics Vision Azure Machine Learning AI Insights

Queries [14]

- Transform File from getting-started...
- Helper Queries [3]
 - Sample File
 - Parameter1 (Sample File)
 - Transform File
- Transform Sample File
- Other Queries [10]
 - Customer
 - Sales
 - g20141ca
 - g20141or
 - g20141wa
 - getting-started-power-bi-data
 - geographytemplate
 - E
 - zcta_place_rel_10
 - Median Groups

= Source{[Schema="",Item="Customer"]}[Data]

BusinessEntityID	Title	FirstName	MiddleName
1699	Mr.	David	R.
1700	Ms.	Rebecca	A.
1701	Ms.	Dorothy	B.
1702	Ms.	Carol Ann	F.
1703	Mr.	Scott	M.
1704	Mr.	Jim	
1705	Mr.	Eric	
1706	Mr.	Michael	L.
1707	Mr.	Pablo	
1708	Ms.	Linda	R.
1709	Mr.	Luke	J.
1710	Ms.	Lisa	K.
1711	Mr.	Michael	
1712	Ms.	Pearlie	J.
1713	Ms.	Andrea	
1714	Mr.	Andy	
1715	Ms.	Justine	J.
1716	Ms.	Deanna	N.

Query Settings

PROPERTIES

Name: Customer
All Properties

APPLIED STEPS

Source
Navigation

16 COLUMNS, 999+ ROWS Column profiling based on top 1000 rows 0 PM

Globomantics Customer Analysis - Power Query Editor

File Home Transform Add Column View Tools Help

Close & Apply New Recent Enter Data Data source settings Manage Parameters Refresh Preview Advanced Editor Manage

Close New Query Data Sources Parameters

Sort Split Column Group By Data Type: Text Use First Row as Headers Replace Values

Transform Combine Text Analytics Vision Azure Machine Learning AI Insights

Queries [14]

- Transform File from getting-started...
- Helper Queries [3]
 - Sample File
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- Other Queries [10]
 - Customer
 - Sales
 - CA Geo
 - g20141or
 - g20141wa
 - getting-started-power-bi-data
 - geographytemplate
 - E
 - zcta_place_rel_10
 - Median Groups

= Table.TransformColumnTypes(Source,{{"Column1", type text},

	Column1	Column2	Column3	Column4
1	ACSSF	CA		40 00
2	ACSSF	CA		40 01
3	ACSSF	CA		40 43
4	ACSSF	CA		40 A0
5	ACSSF	CA		40 C0
6	ACSSF	CA		40 C1
7	ACSSF	CA		40 C2
8	ACSSF	CA		40 E0
9	ACSSF	CA		40 E1
10	ACSSF	CA		40 E2
11	ACSSF	CA		40 G0
12	ACSSF	CA		40 H0
13	ACSSF	CA		50 00
14	ACSSF	CA		50 00
15	ACSSF	CA		50 00
16	ACSSF	CA		50 00
17	ACSSF	CA		50 00
18	ACSSF	CA		50 00

Query Settings

PROPERTIES

Name: CA Geo
All Properties

APPLIED STEPS

Source
Changed Type

Globomantics Customer Analysis - Power Query Editor

File Home Transform Add Column View Tools Help

Close & Apply New Source Recent Sources Enter Data Data source settings Manage Parameters Refresh Preview Advanced Editor Manage Data Type: Text Use First Row as Headers

Close New Query Data Sources Parameters Sort Split Column Group By Replace Values Transform Combine Text Analytics Vision Azure Machine Learning AI Insights

Queries [14]

- Transform File from getting-started...
- Helper Queries [3]
 - Sample File
 - Parameter1 (Sample File)
 - Transform File
- Other C
 - Customer
 - Sales
 - CA Geo
 - g2014
 - g2014
 - getting
 - geogr
 - E
 - zcta_p
 - Media
- g2014
- getting
- geogr
- E
- zcta_p
- Media

Column1 Column2 Column3 Column4

	Column1	Column2	Column3	Column4
1	ACSSF	CA	40	00
2	ACSSF	CA	40	01
3	ACSSF	CA	40	43
4	ACSSF	CA	40	A0
5	ACSSF	CA	40	C0
6	ACSSF	CA	40	C1
7	ACSSF	CA	40	C2
8	ACSSF	CA	40	E0
9	ACSSF	CA	40	E1
10	ACSSF	CA	40	E2
11	ACSSF	CA	40	G0
12	ACSSF	CA	40	H0
13	ACSSF	CA	50	00
14	ACSSF	CA	50	00
15	ACSSF	CA	50	00
16	ACSSF	CA	50	00
17	ACSSF	CA	50	00
18	ACSSF	CA	50	00

Query Settings

PROPERTIES

Name: CA Geo

All Properties

APPLIED STEPS

Source
Changed Type

Globomantics Customer Analysis - Power Query Editor

File Home Transform Add Column View Tools Help

Close & Apply New Source Recent Sources Enter Data Data source settings Manage Parameters Refresh Preview Advanced Editor Manage Data Type: Whole Number Use First Row as Headers Replace Values Close New Query Data Sources Parameters Sort Split Column Group By Transform Combine Text Analytics Vision Azure Machine Learning AI Insights

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 - Customer
 - Sales
 - CA Geo
 - OR Geo
 - WA Geo
 - Survey
 - Geography
 - Survey Headers
 - Location
 - Median Groups

= Table.TransformColumnTypes(#"Promoted Headers",{{"ZCTA5",

ZCTA5	STATE	PLACE	CLASS
601	72	358	U1
602	72	616	U1
602	72	47873	U1
603	72	745	U1
603	72	9689	U1
603	72	68599	U1
606	72	51270	U1
610	72	2680	U1
610	72	27263	U1
610	72	42068	U1
610	72	43702	U1
612	72	3024	U1
612	72	3368	U1
616	72	4658	U1
617	72	5346	U1
617	72	9603	U1
617	72	30372	U1
617	72	35962	U1

Query Settings

PROPERTIES

Name: Location
All Properties

APPLIED STEPS

Source, Promoted Headers, Changed Type

File Home Insert Modeling View Help

Cut Paste Copy Format painter Clipboard

Get data v Excel Power BI datasets SQL Server Enter data Dataverse Recent sources v

Transform data v Refresh data v New visual Text box More visuals v

New measure Quick measure Sensitivity (preview) v Sensitivity Share

Clipboard

Build visuals with your data
Select or drag fields from the Fields pane onto the report canvas.


Filters > Search Filters on this page ... Add data fields here Filters on all pages ... Add data fields here

Visualizations >

- Bar chart
- Line chart
- Stacked bar chart
- Stacked line chart
- Scatter plot
- Map
- Donut chart
- Table
- Matrix
- Radar chart
- Pyramid chart
- Waterfall chart
- Funnel chart
- Gauge chart
- Icon chart
- Text box
- Image
- Calculated field
- Calculated column

Fields > Search

- CA Geo
- Customer
- Geography
- Location
- Median Groups
- OR Geo
- Sales
- Survey
- Survey Headers
- WA Geo

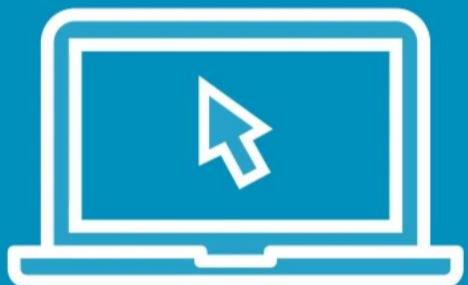
Drill through

Cross-report Off

Keep all filters

Page 1 +

Demo



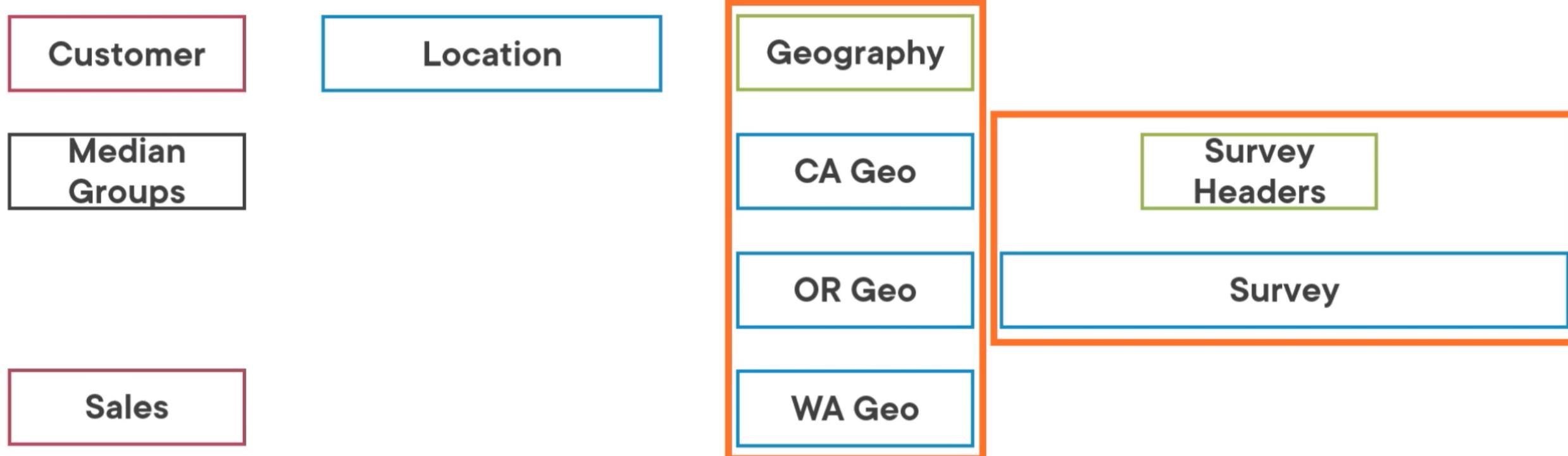
Append queries

Append

Concatenate rows from two tables into a single table.

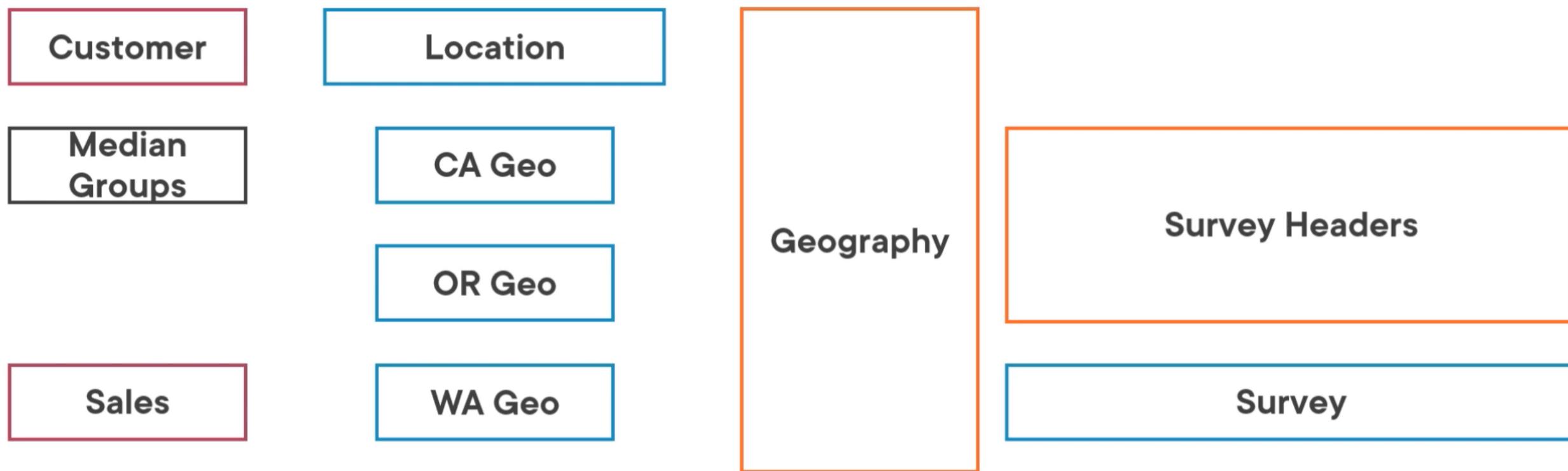
<https://learn.microsoft.com/en-us/power-query/append-queries>

Globomantics Data Assessment



Globomantics Data Assessment

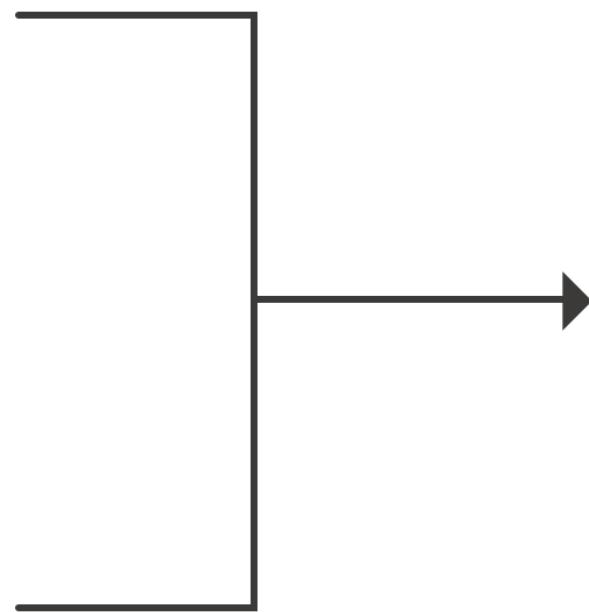
Append queries



The append operation creates a **single table** by adding the contents of one or more tables to another, and aggregates the column headers from the tables to create the schema for the new table.

A	B	C
1	1	1
2	2	2
3	3	3

A	B	D
4	4	4
5	5	5



A	B	C	D
1	1	1	null
2	2	2	null
3	3	3	null
4	4	null	4
5	5	null	5

Power Query - Edit queries

Home Transform Add column View

Get data Enter data Options Manage parameters Refresh Properties Advanced editor Manage Choose columns Remove columns Keep rows Remove rows Sort Split column Group by Data type Use first row as headers Merge queries Append queries Map to standard CDM AI insights

New query Options Parameters Query Manage columns Reduce rows Replace values Transform

Queries < X ✓ fx = #table(1, {{Source}})

Merge queries Append queries

Append queries as new

The screenshot shows the Microsoft Power Query ribbon interface. The 'Transform' tab is active. In the 'Merge queries' section, a dropdown menu is open, highlighted with a red box. It contains two items: 'Append queries' and 'Append queries as new'. The status bar at the bottom shows a table structure with one row and one column, and the formula '= #table(1, {{Source}})'.

Append two tables

For the example in this article, we'll use the following two tables with sample data:

- **Online Sales:** Sales made through an online channel.

	Channel Name	Date	CustomerID	Units
1	Online	6/2/2020	US-187982	20
2	Online	6/2/2020	US-235789	30
3	Online	6/5/2020	US-187982	15
4	Online	6/5/2020	US-235789	40

- **Store Sales:** Sales made through the company's physical locations.

	Date	Units	Referer	CustomerID	Channel Name
1	6/4/2020	200	www.powerbi.com	e-78956	Store A
2	6/4/2020	300	www.powerquery.c...	e-78899	Store B
3	6/7/2020	100	www.xbox.com	e-75214	Store A
4	6/7/2020	70	www.microsoft.com	e-23658	Store B

Power Query performs the append operation based on the names of the column headers found on both tables, and not based on their relative position in the headers sections of their respective tables. The final table will have all columns from all tables appended.

In the event that one table doesn't have columns found in another table, *null* values will appear in the corresponding column, as shown in the **Referer** column of the final query.

Power Query - Edit queries

Home Transform Add column View

Get data Enter data Options Manage parameters Refresh Properties Advanced editor Manage Choose columns Remove columns Keep rows Remove rows Sort Split column Group by Data type: Text Use first row as headers Replace values

Merge queries Append queries Map to entity CDM Combine AI insights

New query Options Parameters Query Manage columns Reduce rows Sort Transform

Queries

Online
Store Sales

Table.Combine({#"Changed Type", #"Store Sales"})

	Channel Name	Date	CustomerID	Units	Referer
1	Online	6/2/2020	US-187982	20	null
2	Online	6/2/2020	US-235789	30	null
3	Online	6/5/2020	US-187982	15	null
4	Online	6/5/2020	US-235789	40	null
5	Store A	6/4/2020	e-78956	200	www.powerbi.com
6	Store B	6/4/2020	e-78899	300	www.powerquery.com
7	Store A	6/7/2020	e-75214	100	www.xbox.com
8	Store B	6/7/2020	e-23658	70	www.microsoft.com

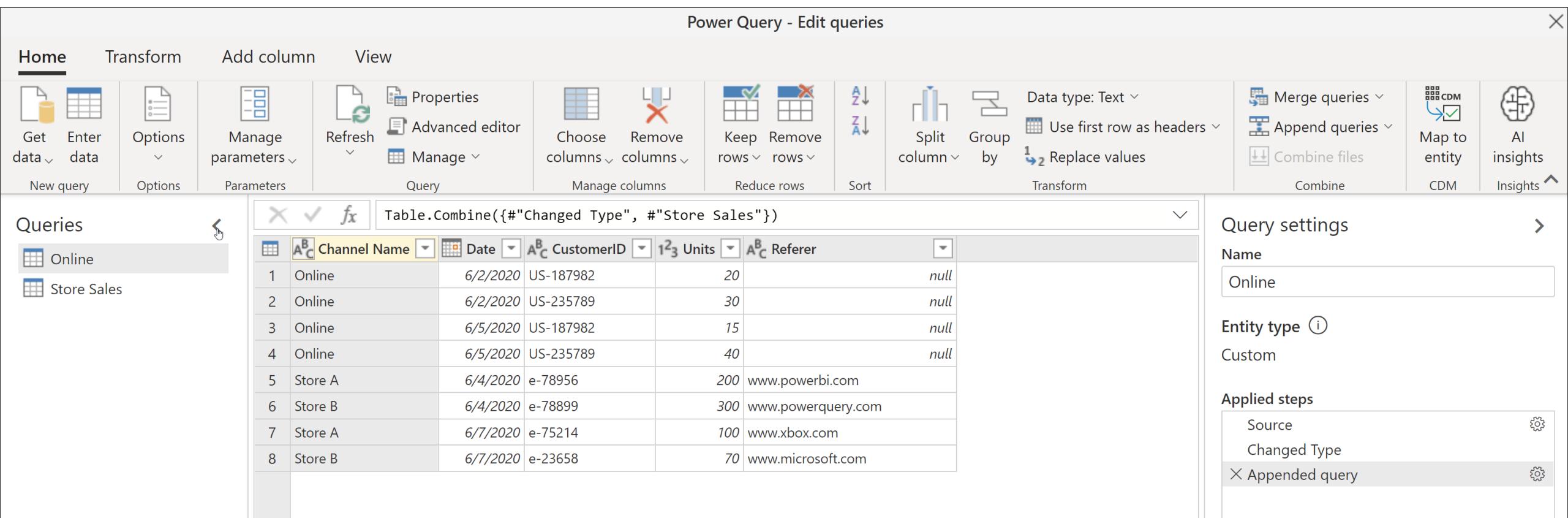
Query settings

Name: Online

Entity type: Custom

Applied steps

Source
Changed Type
Appended query



Globomantics Customer Analysis - Power Query Editor

File Home Transform Add Column View Tools Help

Close & Apply New Recent Enter Data Data source settings Manage Parameters Refresh Preview Manage Data Type: Whole Number Use First Row as Headers Combine Text Analytics Vision Azure Machine Learning AI Insights Close New Query Data Sources Parameters Sort Split Column Group By Replace Values

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- Other Queries [10]
 - Customer
 - Sales
 - CA Geo
 - OR Geo
 - WA Geo
 - Survey
 - Geography
 - Survey Headers
 - Location
 - Median Groups

= Source{[Schema="",Item="Customer"]}[Data]

BusinessEntityID	Title	FirstName	MiddleName
1699	Mr.	David	R.
1700	Ms.	Rebecca	A.
1701	Ms.	Dorothy	B.
1702	Ms.	Carol Ann	F.
1703	Mr.	Scott	M.
1704	Mr.	Jim	
1705	Mr.	Eric	
1706	Mr.	Michael	L.
1707	Mr.	Pablo	
1708	Ms.	Linda	R.
1709	Mr.	Luke	J.
1710	Ms.	Lisa	K.
1711	Mr.	Michael	
1712	Ms.	Pearlie	J.
1713	Ms.	Andrea	
1714	Mr.	Andy	
1715	Ms.	Justine	J.
1716	Ms.	Deanna	N.

Query Settings

PROPERTIES

Name: Customer
All Properties

APPLIED STEPS

Source
Navigation

Globomantics Customer Analysis - Power Query Editor

File Home Transform Add Column View Tools Help

Close & Apply New Recent Enter Data Data source settings Manage Parameters Refresh Preview Advanced Editor Manage Data Type: Text Use First Row as Headers Combine Text Analytics Vision Azure Machine Learning AI Insights

Close New Query Data Sources Parameters Sort Split Column Group By Replace Values

Queries [14]

- Transform File from getting-started...
- Helper Queries [3]
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- Transform Sample File
- Other Queries [10]
 - Customer
 - Sales
 - CA Geo
 - OR Geo
 - WA Geo
 - Survey
 - Geography
 - Survey Headers
 - Location
 - Median Groups

= Table.TransformColumnTypes(Source,{{"Column1", type text},

	Column1	Column2	Column3	Column4
1	ACSSF	CA		40 00
2	ACSSF	CA		40 01
3	ACSSF	CA		40 43
4	ACSSF	CA		40 A0
5	ACSSF	CA		40 C0
6	ACSSF	CA		40 C1
7	ACSSF	CA		40 C2
8	ACSSF	CA		40 E0
9	ACSSF	CA		40 E1
10	ACSSF	CA		40 E2
11	ACSSF	CA		40 G0
12	ACSSF	CA		40 H0
13	ACSSF	CA		50 00
14	ACSSF	CA		50 00
15	ACSSF	CA		50 00
16	ACSSF	CA		50 00
17	ACSSF	CA		50 00
18	ACSSF	CA		50 00

Query Settings

PROPERTIES

Name: CA Geo

All Properties

APPLIED STEPS

Source

Changed Type

Globomantics Customer Analysis - Power Query Editor

File Home Transform Add Column View Tools Help

Close & Apply New Recent Enter Data Data source settings Manage Parameters Refresh Preview Advanced Editor Manage Data Type: Text Use First Row as Headers Combine Text Analytics Vision Azure Machine Learning AI Insights Close New Query Data Sources Parameters Query Sort Split Column Group By Replace Values

Queries [14]

- Transform File from getting-started...
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 - Sample File
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 - Transform File
- Transform Sample File
- Other Queries [10]
 - Customer
 - Sales
 - CA Geo
 - OR Geo
 - WA Geo
 - Survey
 - Geography
 - Survey Headers
 - Location
 - Median Groups

= Table.TransformColumnTypes(geographytemplate1,{{"Column1",

	Column1	Column2	Column3
1	FILEID	STUSAB	SUMLEVEL
2	Always equal to ACS Summary File identification	State Postal Abbreviation	Summary Level

The previous table has information of geo in this geography table

We need to append geography file with geofile

Query Settings

PROPERTIES

Name: Geography

All Properties

APPLIED STEPS

Source, Navigation, Changed Type

Globomantics Customer Analysis - Power Query Editor

File Home Transform Add Column View Tools Help

Close & Apply New Recent Enter Data source settings Manage Parameters Refresh Preview Advanced Editor Manage Data Type: Text Use First Row as Headers Replace Values Combine Text Analytics Vision Azure Machine Learning AI Insights

Close New Query Data Sources Parameters Sort Split Column Group By Transform

Queries [14]

- Transform File from getting-started...
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 - Sample File
 - Parameter1 (Sample File)
 - Transform File
- Transform Sample File
- Other Queries [10]
 - Customer
 - Sales
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 - OR Geo
 - WA Geo
 - Survey
 - Geography
 - Survey Headers
 - Location
 - Median Groups

= Table.TransformColumnTypes(geographytemplate1,{{"Column1",

Column1 Column2 Column3

	Column1	Column2	Column3
1	FILEID	STUSAB	SUMLEVEL
2	Always equal to ACS Summary File identification	State Postal	

Append Queries

Append this query to another query in this file.

Merge Queries Append Queries Combine Geography All Properties

APPLIED STEPS

- Source
- Navigation
- Changed Type

The screenshot shows the Microsoft Power Query Editor interface. The 'Geography' query is selected in the 'Queries' list on the left. A red arrow points to the 'Geography' entry in the list. On the right, the 'Transform' tab is active, showing the M code for transforming the 'geographytemplate1' table. A context menu is open over the 'Geography' query, with a red arrow pointing to the 'Append Queries' option under the 'Combine' section. The 'Applied Steps' pane on the right shows the steps taken: 'Source', 'Navigation', and 'Changed Type'. The 'Changed Type' step is highlighted with a gray background.

Globomantics Customer Analysis - Power Query Editor

File Home Transform Add Column View Tools Help

Close & Apply New Recent Enter Data Data source settings Manage Parameters Refresh Preview Advanced Editor Manage

Close New Query Data Sources Parameters Query

Sort Split Column Group By Data Type: Text Use First Row as Headers Replace Values Transform

Text Analytics Vision Azure Machine Learning AI Insights

Queries [14] < X ✓ fx = Table.TransformColumnTypes(geographytemplate1,{{"Column1",

Query Settings X

Append

Concatenate rows from three or more tables into a single table.

Two tables Three or more tables

Available tables

- Geography (Current)
- Customer
- Sales
- CA Geo
- OR Geo
- WA Geo
- Survey
- Transform Sample File
- Survey Headers
- Location

Tables to append

- Geography (Current)

Add >> OK Cancel

Properties

STEPS

Source Navigation Merged Type

53 COLUMNS, 2 ROWS Column profile PREVIEW DOWNLOADED ON MONDAY

Globomantics Customer Analysis - Power Query Editor

File Home Transform Add Column View Tools Help

Close & Apply New Recent Enter Data Data source settings Manage Parameters Refresh Preview Advanced Editor Manage

Close New Query Data Sources Parameters Query

Sort Split Column Group By Data Type: Text Use First Row as Headers Replace Values Transform

Text Analytics Vision Azure Machine Learning AI Insights

Queries [14]

= Table.TransformColumnTypes(geographytemplate1,{{"Column1",

Transform File from getting... Helper Queries [3] Sample File Parameter1 (Sample File) Transform File Transform Sample File Other Queries [10] Customer Sales CA Geo OR Geo WA Geo Survey Geography Survey Headers Location Median Groups

Append

Concatenate rows from three or more tables into a single table.

Two tables Three or more tables

Available tables

Geography (Current)
Customer
Sales
CA Geo
OR Geo
WA Geo
Survey
Transform Sample File
Survey Headers
Location

Add >>

Tables to append

Geography (Current)
CA Geo
OR Geo
WA Geo

OK Cancel

PREVIEW DOWNLOADED ON MONDAY

Globomantics Customer Analysis - Power Query Editor

File Home Transform Add Column View Tools Help

Close & Apply New Recent Enter Data source settings Manage Parameters Refresh Preview Manage Properties Advanced Editor Manage Columns Reduce Rows Sort Split Column Group By Data Type: Text Use First Row as Headers Replace Values Combine Text Analytics Vision Azure Machine Learning AI Insights

Queries [14]

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 - Sales
 - CA Geo
 - OR Geo
 - WA Geo
 - Survey
 - Geography
 - Survey Headers
 - Location
 - Median Groups

= Table.Combine({#"Changed Type", #"CA Geo", #"OR Geo", #"WA"})

ABC Column1 ABC Column2 ABC Column3

FILEID		SUMLEVEL
1	Always equal to A	Summary Level
2		
3	ACSSF	
4	ACSSF	
5	ACSSF	
6	ACSSF	
7	ACSSF	
8	ACSSF	
9	ACSSF	
10	ACSSF	
11	ACSSF	
12	ACSSF	
13	ACSSF	
14	ACSSF	
15	ACSSF	
16	ACSSF	
17	ACSSF	
18	ACSSF	
19		

Sort Ascending Sort Descending Clear Sort Clear Filter Remove Empty Text Filters

Search

(Select All) CA OR State Postal Abbreviation STUSAB WA

List may be incomplete. Load more OK Cancel

Query Settings

PROPERTIES

Name Geography All Properties

APPLIED STEPS

Source Navigation Changed Type Appended Query

Globomantics Customer Analysis - Power Query Editor

File Home Transform Add Column View Tools Help

Close & Apply New Recent Enter Data Data source settings Manage Parameters Refresh Preview Advanced Editor Manage Data Type: Text Use First Row as Headers Replace Values Close New Query Data Sources Parameters Query Sort Split Column Group By Transform

Text Analytics Vision Azure Machine Learning AI Insights

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= Table.Combine({#"Changed Type", #"CA Geo", #"OR Geo", #"WA Geo"})

	A B C Column1	A B C Column2	A B C Column3
1	FILEID	STUSAB	SUMLEVEL
2	Always equal to ACS Summary File identification	State Postal Abbreviation	Summary Level
3	ACSSF	CA	
4	ACSSF	CA	
5	ACSSF	CA	
6	ACSSF	CA	
7	ACSSF	CA	
8	ACSSF	CA	
9	ACSSF	CA	
10	ACSSF	CA	
11	ACSSF	CA	
12	ACSSF	CA	
13	ACSSF	CA	
14	ACSSF	CA	
15	ACSSF	CA	
16	ACSSF	CA	
17	ACSSF	CA	
18	ACSSF	CA	
19	ACSSF	CA	

Query Settings

PROPERTIES

Name: Geography
All Properties

APPLIED STEPS

Source, Navigation, Changed Type, Appended Query

Orange arrow pointing to the "Appended Query" step in the Applied Steps list.

Globomantics Customer Analysis - Power Query Editor

File Home Transform Add Column View Tools Help

Close & Apply New Recent Enter Data Data source settings Manage Parameters Refresh Preview Manage Properties Advanced Editor Manage Columns Reduce Rows Sort Split Column Group By Data Type: Any Use First Row as Headers Replace Values Combine Text Analytics Vision Azure Machine Learning AI Insights Close New Query

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 - Sales
 - CA Geo
 - OR Geo
 - WA Geo
 - Survey
 - Geography
 - Survey Headers

= Excel.Workbook(File.Contents)
ABC 123 Name ABC 123 Data
1 geographytemplate Table

Query Settings

PROPERTIES

Name: Geography

All Properties

APPLIED STEPS

Source	Navigation	Source
Navigated	Source	Changed Type
		Appended Query

Let's do for survey data

Globomantics Customer Analysis - Power Query Editor

File Home Transform Add Column View Tools Help

Close & Apply New Source Recent Enter Data Data source settings Manage Parameters Refresh Preview Manage Query

Manage Columns Reduce Rows Sort Split Column Group By Replace Values Data Type: Text Use First Row as Headers Combine

Text Analytics Vision Azure Machine Learning AI Insights

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 - CA Geo
 - OR Geo
 - WA Geo
 - Survey
 - Geography
 - Survey Headers
 - Location
 - Median Groups

= Table.TransformColumnTypes(E1,{{"Column1", type text},

	Column1	Column2	Column3	Col
1	FILEID	FILETYPE	STUSAB	CHARIT
2	FILEID	FILETYPE	STUSAB	CHARITER

Merge Queries Append Queries Combine Survey Headers All Properties

APPLIED STEPS

- Source
- Navigation
- Changed Type

Globomantics Customer Analysis - Power Query Editor

File Home Transform Add Column View Tools Help

Close & Apply New Recent Enter Data Data source settings Manage Parameters Refresh Preview Manage Properties Advanced Editor Manage Columns Reduce Rows Sort Split Column Group By Data Type: Text Use First Row as Headers Replace Values Combine Text Analytics Vision Azure Machine Learning AI Insights Close New Query Data Sources Parameters Query

Queries [14]

= Table.TransformColumnTypes(E1,{{"Column1", type text}},

Transform File from getting... Helper Queries [3] Sample File Parameter1 (Sample File) Transform File Transform Sample File Other Queries [10] Customer Sales CA Geo OR Geo WA Geo Survey Geography Survey Headers Location Median Groups

Append

Concatenate rows from two tables into a single table.

Two tables Three or more tables

Table to append

Survey

OK Cancel

Globomantics Customer Analysis - Power Query Editor

File Home Transform Add Column View Tools Help

Close & Apply New Recent Enter Data source settings Manage Parameters Refresh Preview Advanced Editor Properties Manage Columns Manage Rows Sort Split Column Group By Data Type: Text Use First Row as Headers Replace Values Combine Text Analytics Vision Azure Machine Learning Close New Query Data Sources Parameters Query Transform AI Insights

Queries [14]

- Transform File from getting-started...
- Helper Queries [3]
 - Sample File
 - Parameter1 (Sample File)
 - Transform File
- Transform Sample File
- Other Queries [10]
 - Customer
 - Sales
 - CA Geo
 - OR Geo
 - WA Geo
 - Survey
 - Geography
 - Survey Headers
 - Location
 - Median Groups

= Table.Combine({#"Changed Type", Survey})

	Column1	Column2	Column3
1	FILEID		
2	FILEID		
3	ACSSF		
4	ACSSF		
5	ACSSF		
6	ACSSF		
7	ACSSF		
8	ACSSF		
9	ACSSF		
10	ACSSF		
11	ACSSF		
12	ACSSF		
13	ACSSF		
14	ACSSF		
15	ACSSF		
16	ACSSF		
17	ACSSF		
18	ACSSF		

Sort Ascending
Sort Descending
Clear Sort
Clear Filter
Remove Empty
Text Filters

Search

(Select All) ca or STUSAB wa

List may be incomplete. Load more

OK Cancel

Query Settings

PROPERTIES

Name: Survey Headers

All Properties

APPLIED STEPS

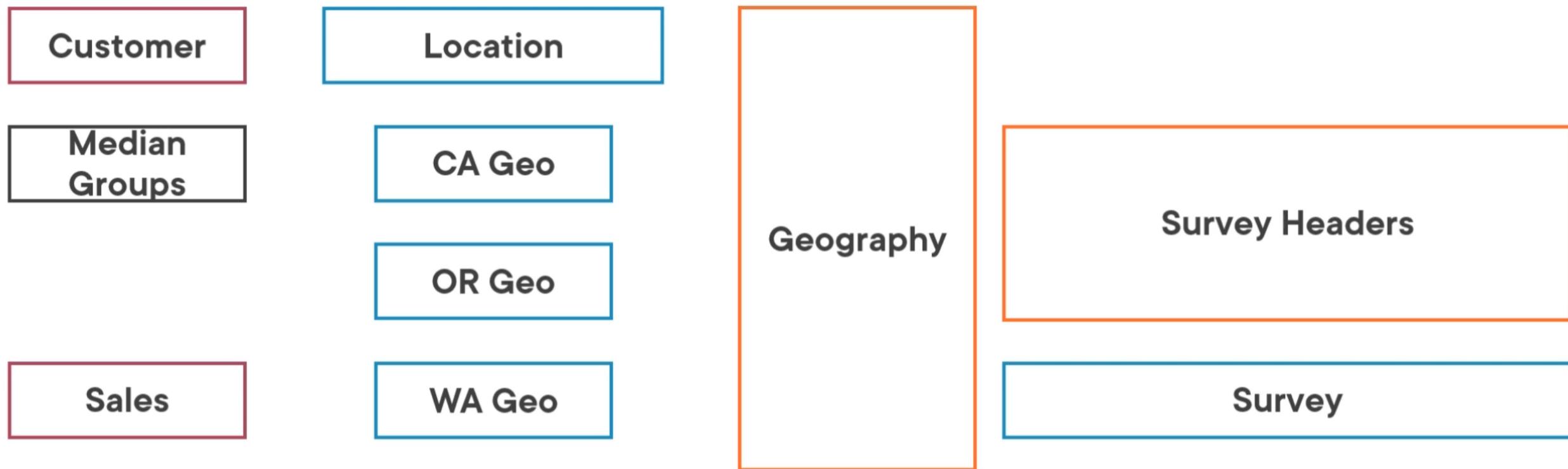
Source, Navigation, Changed Type, Appended Query

Demo



Group queries

Globomantics Data Assessment



Globomantics Data Assessment

Group queries

Customer

Location

Median
Groups

Geography

Survey

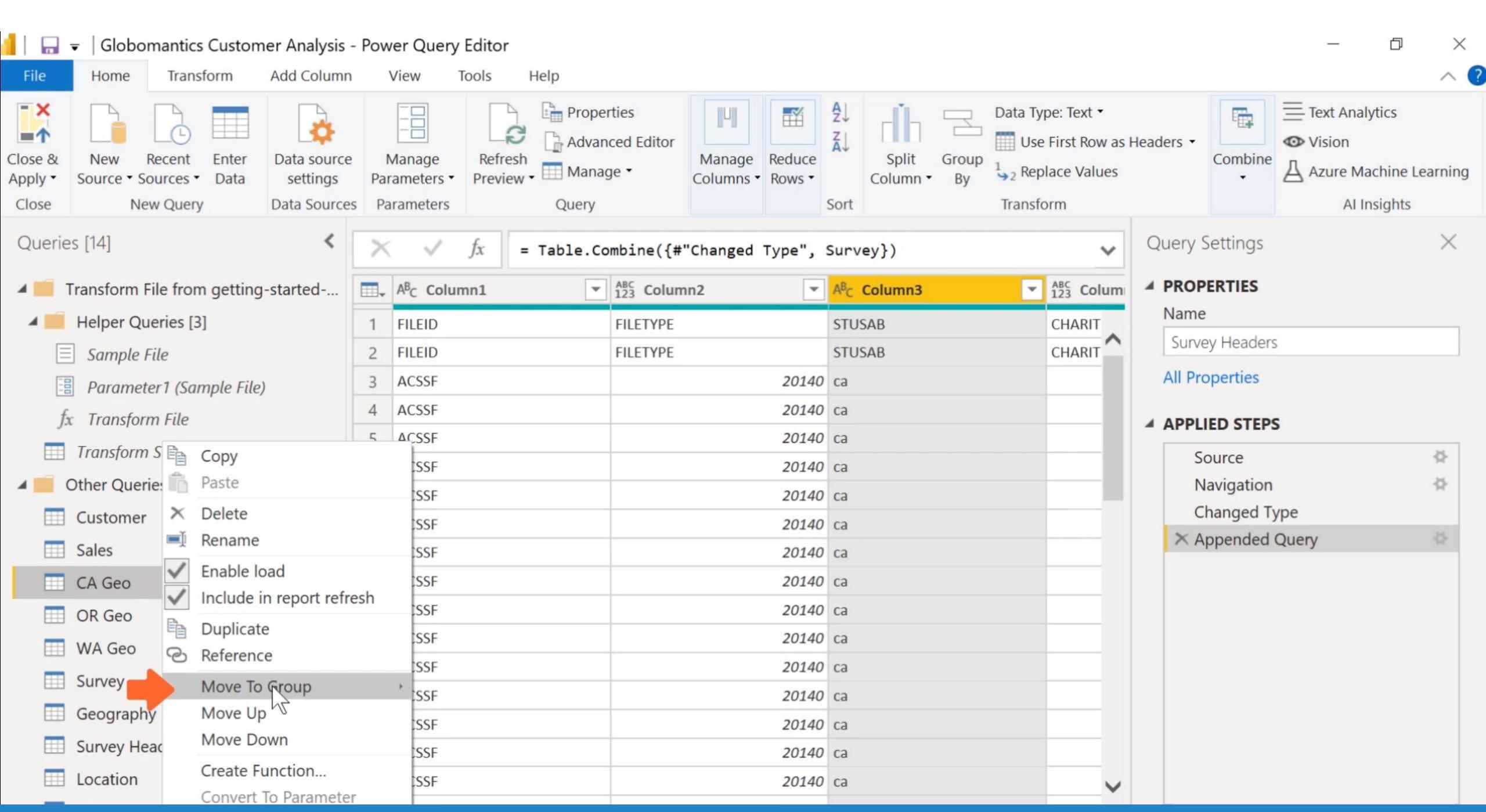
Sales

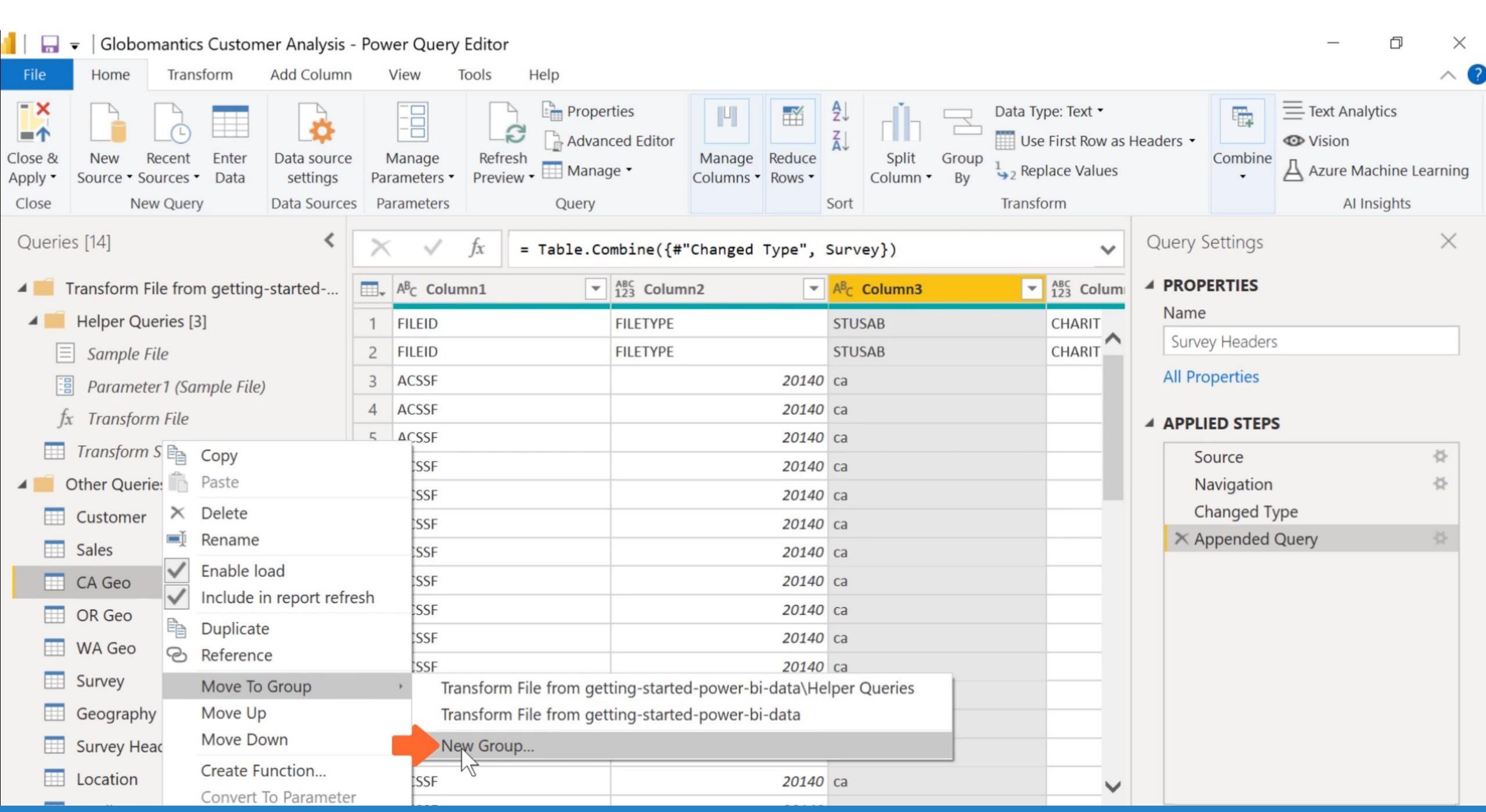
CA Geo

OR Geo

WA Geo

State Surveys





Globomantics Customer Analysis - Power Query Editor

File Home Transform Add Column View Tools Help

Close & Apply New Recent Enter Data Data source settings Manage Parameters Refresh Preview Manage Properties Advanced Editor Manage Columns Reduce Rows Sort Split Column Group By Data Type: Text Use First Row as Headers Replace Values Combine Text Analytics Vision Azure Machine Learning AI Insights Close New Query Data Sources Parameters Query Transform

Queries [14]

- Transform File from getting-started...
- Helper Queries [3]
 - Sample File
 - Parameter1 (Sample File)
- Transform File
- Transform Sample File
- Other Queries [10]
 - Customer
 - Sales
 - CA Geo
 - OR Geo
 - WA Geo
 - Survey
 - Geography
 - Survey Headers

New Group

Name: Queries not in model

Description:

OK Cancel

= Table.Combine({#"Changed Type". Survey})

		20140	ca
1	FILEID		
2	FILEID		
3	ACSSF		
4	ACSSF		
5	ACSSF		
6	ACSSF		
7	ACSSF		
8	ACSSF		
9	ACSSF		
10	ACSSF		
11	ACSSF		
12	ACSSF		
13	ACSSF		
14	ACSSF		
15	ACSSF		
16	ACSSF		

Query Settings

PROPERTIES

Name: Survey Headers

All Properties

APPLIED STEPS

Source, Navigation, Changed Type, Appended Query

Queries [14]

▲ Transform File from getting-start...

▲ Helper Queries [3]

Sample File

Parameter1 (Sample File)

Transform File

Transform Sample File

▲ Queries not in model [1]

CA Geo

▲ Other Queries [9]

Customer

Sales

OR Geo

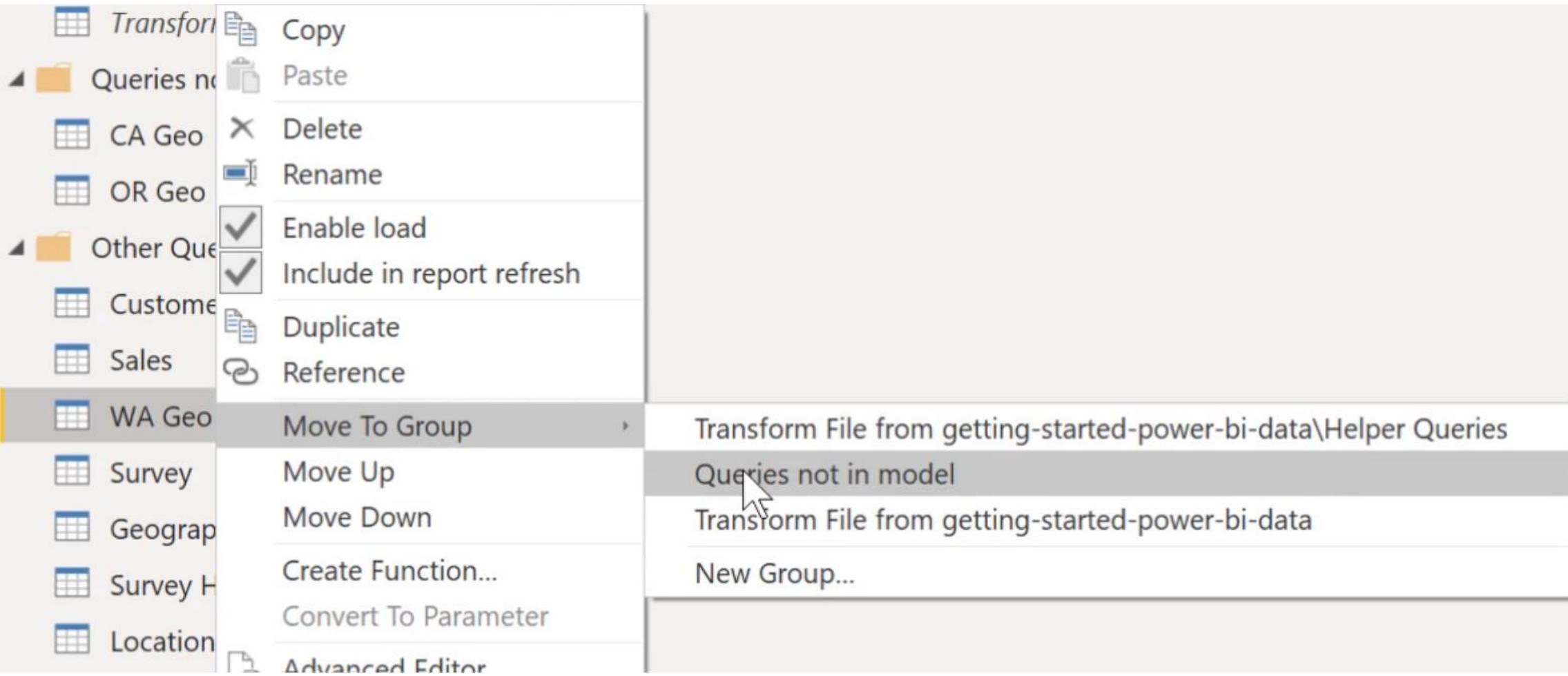
Globomantics Customer Analysis - Power Query Editor

File Home Transform Add Column View Tools Help

Close & Apply New Recent Enter Data Data source settings Manage Parameters Refresh Preview Advanced Editor Manage Properties Sort Data Type: Text Use First Row as Headers Replace Values Close New Query Data Sources Parameters Query Split Column Group By Transform Combine Text Analytics Vision Azure Machine Learning AI Insights

Queries [14]

- Transform File from getting-started-power-bi-data\Helper Queries [3]
 - Sample File
 - Parameter1 (Sample File)
 - Transform File
- Transform San
- Queries not in model
- CA Geo
- Other Queries [14]
 - Customer
 - Sales
 - OR Geo
 - WA Geo
 - Survey
 - Geography
 - Survey Header
 - Location
- Move To Group
 - Transform File from getting-started-power-bi-data\Helper Queries
 - Queries not in model
 - Transform File from getting-started-power-bi-data
 - New Group...
- Move Up
- Move Down
- Create Function...
- Convert To Parameter
- Advanced Editor
- Properties



Globomantics Customer Analysis - Power Query Editor

File Home Transform Add Column View Tools Help

Close & Apply New Source Recent Sources Enter Data Data source settings Manage Parameters Refresh Preview Advanced Editor Manage Properties Data Type: Text Use First Row as Headers Combine Text Analytics Vision Azure Machine Learning AI Insights

Close New Query Data Sources Parameters Query Sort Split Column Group By Replace Values Transform

Queries [14]

- Transform File from getting-start...
- Helper Queries [3]
 - Sample File
 - Parameter1 (Sample File)
 - Transform File
- Transform File
- Queries [3]
 - CA Ge...
 - OR Ge...
 - WA Ge...
- Other Q...
 - Customer
 - Sales
 - Survey
 - Geogr...
 - Survey
 - Location

Move To Group

- Transform File from getting-started-power-bi-data\Helper Queries
- Queries not in model
- Transform File from getting-started-power-bi-data
- New Group...

Move Up

Move Down

Create Function...

Convert To Parameter

Advanced Editor

Globomantics Customer Analysis - Power Query Editor

File Home Transform Add Column View Tools Help

Close & Apply New Recent Enter Data Data source settings Manage Parameters Refresh Preview Properties Advanced Editor Manage Manage Columns Reduce Rows Sort Data Type: Text Use First Row as Headers Replace Values Combine Text Analytics Vision Azure Machine Learning Close New Query Data Sources Parameters Query Split Column Group By Transform AI Insights

Queries [14]

- Transform File from getting-start...
- Helper Queries [3]
 - Sample File
 - Parameter1 (Sample File)
 - Transform File
- Transform Sample File
- Queries not in model [4]
 - CA Geo
 - OR Geo
 - WA Geo
 - Survey
- Other Queries [6]
 - Customer
 - Sales
 - Geography
 - Survey Headers
 - Location

Rename Survey as State Surveys

Globomantics Customer Analysis - Power Query Editor

File Home Transform Add Column View Tools Help

Close & Apply New Recent Enter Data Data source settings Manage Parameters Refresh Preview Manage Columns Manage Rows Sort Split Column Group By Data Type: Text Use First Row as Headers Replace Values Combine Text Analytics Vision Azure Machine Learning AI Insights

Close New Query Data Sources Parameters Query

Queries [14]

- Transform File from getting-start...
- Helper Queries [3]
 - Sample File
 - Parameter1 (Sample File)
 - Transform File
- Transform Sample File
- Queries not in model [4]
 - CA Geo
 - OR Geo
 - WA Geo
 - State Surveys
- Other Queries [6]
 - Customer
 - Sales
 - Geography
 - Survey
 - Location

= Table.TransformColumnTypes(#"Expanded Table Column1",{

Query Settings

PROPERTIES

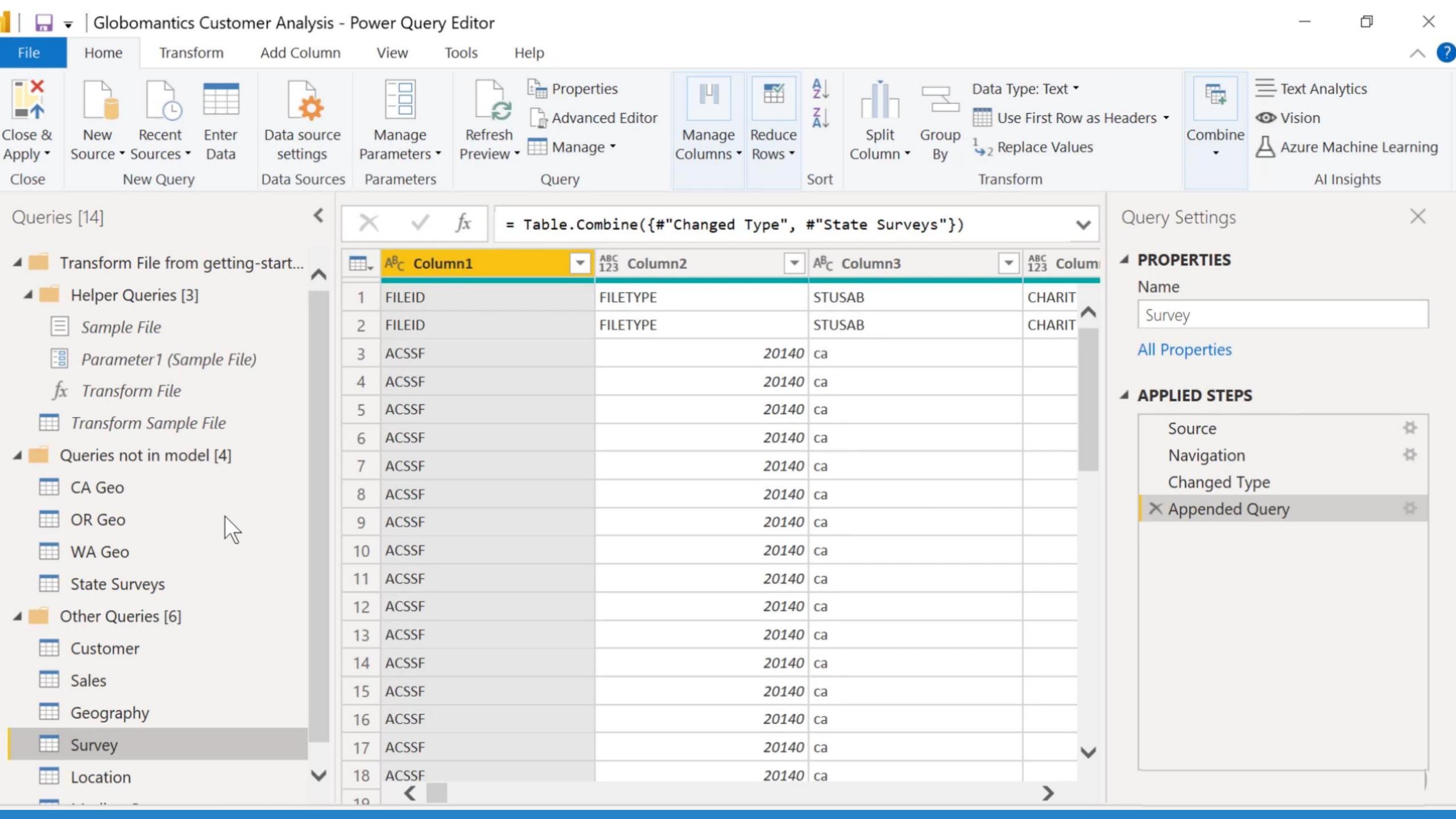
Name: Survey

All Properties

APPLIED STEPS

Source, Navigation, Changed Type, Appended Query

Rename Survey Headers as Survey



Demo



Promote header rows

Globomantics Data Assessment

By Using Promoting Header Rows Operation we can fix this

Geography

Column1	Column2	Column3	Column4	Column5	Column6
FILEID	STUSAB	SUMLEVEL	COMPONENT	LOGRECNO	US
Always equal...	State Pos...	Summary L...	Geographic...	Logical Rec...	US
ACSSF	CA	40 00		1	
ACSSF	CA	40 01		2	
ACSSF	CA	40 43		3	

Globomantics Data Assessment

Promote header rows

Geography

Power Query promotes first row into header as a header row

FILEID	STUSAB	SUMLEVEL	COMPONENT	LOGRECNO	US
Always equal...	State Pos...	Summary L...	Geographic...	Logical Rec...	US
ACSSF	CA	40 00		1	
ACSSF	CA	40 01		2	
ACSSF	CA	40 43		3	

Globomantics Data Assessment

Remove top row

Geography

FILEID	STUSAB	SUMLEVEL	COMPONENT	LOGRECNO	US
ACSSF	CA	40 00		1	
ACSSF	CA	40 01		2	
ACSSF	CA	40 43		3	

Globomantics Data Assessment

Survey

Before

Column1	Column2	Column3	Column4	Column5	Column6
FILEID	FILETYPE	STUSAB	CHARITER	SEQUENCE	LOGRECNO
FILEID	FILETYPE	STUSAB	CHARITER	SEQUENCE	LOGRECNO
ACSSF	20140	ca	0	77	1
ACSSF	20140	ca	0	77	2
ACSSF	20140	ca	0	77	3

After

FILEID	FILETYPE	STUSAB	CHARITER	SEQUENCE	LOGRECNO
ACSSF	20140	ca	0	77	1
ACSSF	20140	ca	0	77	2
ACSSF	20140	ca	0	77	3

Globomantics Customer Analysis - Power Query Editor

File Home Transform Add Column View Tools Help

Close & Apply New Recent Enter Data Data source settings Manage Parameters Refresh Preview Advanced Editor Manage Data Sources Parameters Query Sort Transform

Queries [14]

Helper Queries [3]

- Sample File
- Parameter1 (Sample File)

Transform File

Transform Sample File

Queries not in model [4]

- CA Geo
- OR Geo
- WA Geo
- State Surveys

Other Queries [6]

- Customer
- Sales
- Geography
- Survey

Use First Row as Headers

Group By

Replace Values

Text Analytics

Vision

Azure Machine Learning

AI Insights

= Table.PromoteHeaders(#"Appended Query", {1})

	Column1	Column2	Column3
1	FILEID	STUSAB	SUMLEVEL
2	Always equal to ACS Summary File identification	State Postal Abbreviation	Summary Level
3	ACSSF	CA	
4	ACSSF	CA	
5	ACSSF	CA	
6	ACSSF	CA	
7	ACSSF	CA	
8	ACSSF	CA	
9	ACSSF	CA	
10	ACSSF	CA	
11	ACSSF	CA	
12	ACSSF	CA	
13			

Column1 FILEID

Column2 STUSAB

Column3 SUMLEVEL

Properties

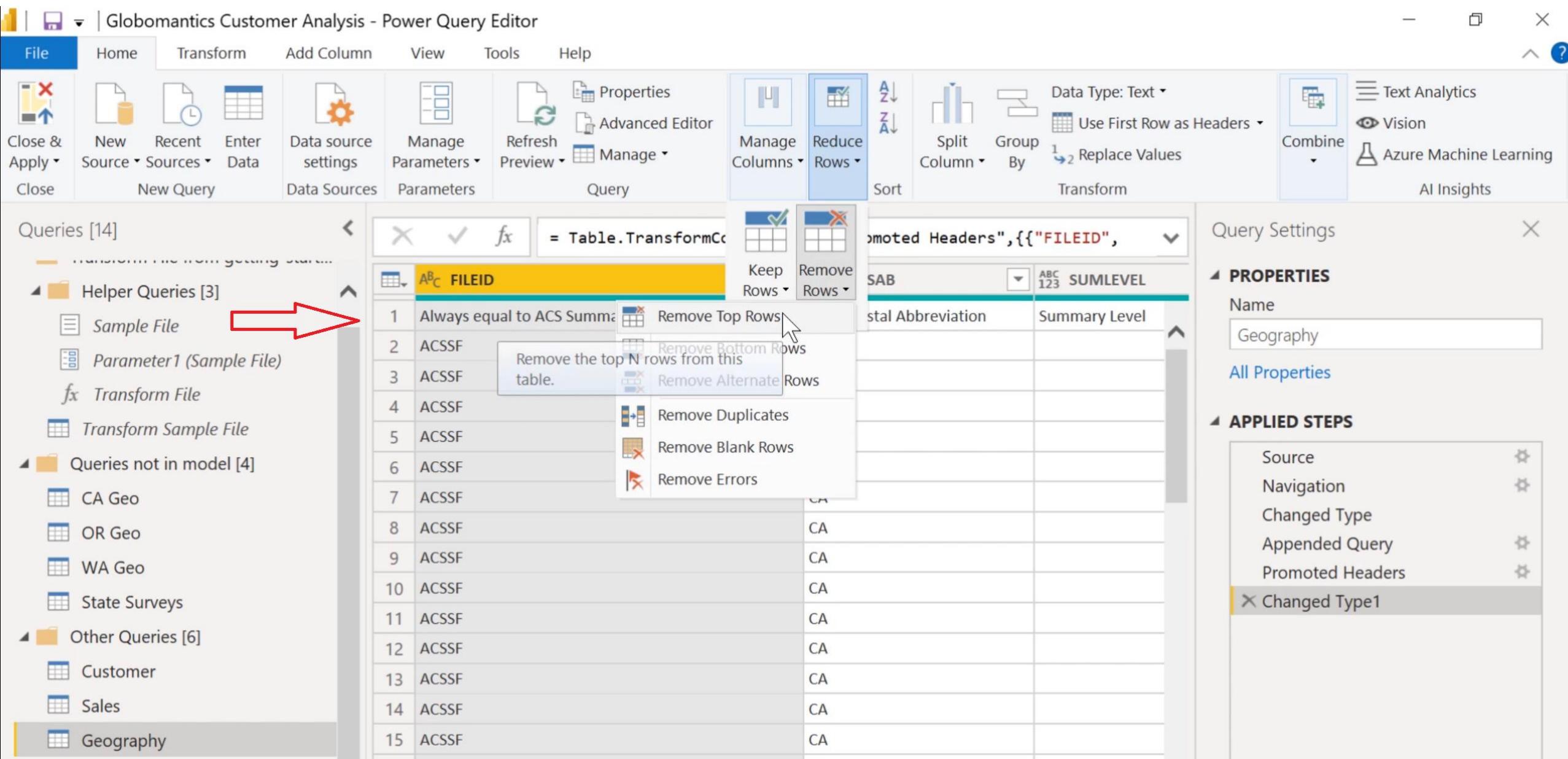
Name: Geography

All Properties

Applied Steps

- Source
- Navigation
- Changed Type
- Appended Query
- Promoted Headers

Query Settings



Remove Top Rows



Specify how many rows to remove from the top.

Number of rows

OK

Cancel

Queries [14]

- Helper Queries [3]
 - Sample File
 - Parameter1 (Sample File)
 - Transform File
- Queries not in model [4]
 - CA Geo
 - OR Geo
 - WA Geo
 - State Surveys
- Other Queries [6]
 - Customer
 - Sales
 - Geography
 - Survey
 - Location

= Table.Skip(#"Changed Type1",1)

FILEID	STUSAB
1 ACSSF	CA
2 ACSSF	CA
3 ACSSF	CA
4 ACSSF	CA
5 ACSSF	CA
6 ACSSF	CA
7 ACSSF	CA
8 ACSSF	CA
9 ACSSF	CA
10 ACSSF	CA
11 ACSSF	CA
12 ACSSF	CA
13 ACSSF	CA
14 ACSSF	CA
15 ACSSF	CA
16 ACSSF	CA
17 ACSSF	CA
18 ACSSF	CA

Globomantics Customer Analysis - Power Query Editor

File Home Transform Add Column View Tools Help

Close & Apply ▾ New Recent Enter Data source settings Manage Parameters Refresh Preview Advanced Editor Manage Columns Manage Rows Sort Split Column Group By Data Type: Text ▾ Use First Row as Key Replace Values

Close New Query Data Sources Parameters Query Transform

Queries [14]

Helper Queries [3]

- Sample File
- Parameter1 (Sample File)
- Transform File
- Transform Sample File

Queries not in model [4]

- CA Geo
- OR Geo
- WA Geo
- State Surveys

Other Queries [6]

- Customer
- Sales
- Geography
- Survey
- Location

= Table.Combine({#"Changed Type", #"State Surveys"})

	Column6	Column7	Column8
1	RECNO	B19001_001	B19001
2	RECNO	HOUSEHOLD INCOME IN THE PAST 12 MONTHS (IN 2014 INFLATION-ADJUSTED DOLLARS)	HOU
3		1	12758648
4		2	12101308
5		3	657340
6		4	12651717
7		5	12432946
8		6	5996684
9		7	6436262
10		8	218771
11		9	56766
12		10	162005
13		11	106931
14		12	325702
15		13	563601
16		14	85366
17		15	387936
18		16	65804

Remove Top Rows



Specify how many rows to remove from the top.

Number of rows

OK

Cancel

Globomantics Customer Analysis - Power Query Editor

File Home Transform Add Column View Tools Help

Close & Apply New Recent Enter Data Data source settings Manage Properties Refresh Advanced Editor Manage Parameters Preview Manage Sort Group By Data Type: Text Use First Row as Head Close New Query Data Sources Parameters Query Transform

Queries [14]

- Helper Queries [3]
 - Sample File
 - Parameter1 (Sample File)
 - Transform File
- Queries not in model [4]
 - CA Geo
 - OR Geo
 - WA Geo
 - State Surveys
- Other Queries [6]
 - Customer
 - Sales
 - Geography
 - Survey
 - Location

= Table.Skip(#"Appended Query",1)

	Column6	Column7
1	RECNO	HOUSEHOLD INCOME IN THE PAST 12 MONTHS (IN 2014 INFLATION-ADJUSTED DOLLARS)
2		12758648
3		12101308
4		657340
5		12651717
6		12432946
7		5996684
8		6436262
9		218771
10		56766
11		162005
12		106931
13		325702
14		563601
15		85366
16		387936
17		65804

Demo



Fix column data types

Globomantics Data Assessment

Geography

ABC FILEID	ABC STUSAB	ABC SUMLEVEL 123	ABC COMPONENT	ABC LOGRECNO 123
ACSSF	CA	40 00		1
ACSSF	CA	40 01		2
ACSSF	CA	40 43		3

Globomantics Data Assessment

Fix data types

Geography

ABC FILEID	ABC STUSAB	123 SUMLEVEL	ABC COMPONENT	123 LOGRECNO
ACSSF	CA	40 00		1
ACSSF	CA	40 01		2
ACSSF	CA	40 43		3

Globomantics Data Assessment

Location

Sometimes we need
to do manually

123 ZCTA5	123 STATE	123 PLACE	ABC CLASSFP	123 GEOID
601	72	358	U1	7200358
602	72	616	U1	7200616
602	72	47873	U1	7247873

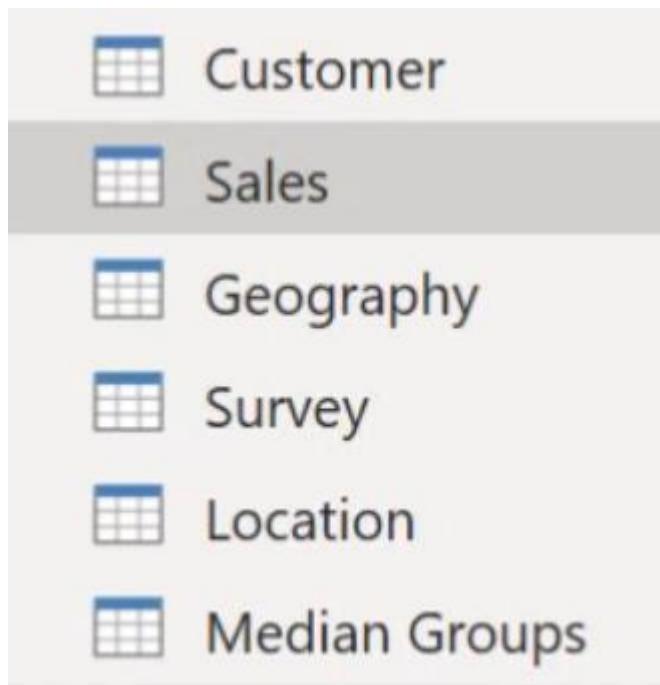
Globomantics Data Assessment

Fix column metadata: name and data type

Location

ABC Zip Code	123 STATE	123 PLACE	ABC CLASSFP	123 GEOID
601	72	358	U1	7200358
602	72	616	U1	7200616
602	72	47873	U1	7247873

Verify Each Data Manually and Correct



Customer table	ok
Sales table	ok
Geography	
Location	

Globomantics Customer Analysis - Power Query Editor

File Home Transform Add Column View Tools Help

Close & Apply New Recent Enter Data Data source settings Manage Parameters Refresh Preview Advanced Editor Manage

Close New Query Data Sources Parameters Query

Data Type: Any Use First Row as Headers Replace Values Combine Azure Machine Learning AI Insights

Queries [14]

- Helper Queries [3]
 - Sample File
 - Parameter1 (Sample File)
 - Transform File
- Queries not in model [4]
 - CA Geo
 - OR Geo
 - WA Geo
 - State Surveys
- Other Queries [6]
 - Customer
 - Sales
 - Geography
 - Survey
 - Location
 - Median Groups

= Table.Skip(#"Changed Type1",1)

	STUSAB	SUMLEVEL	COMPONENT
1	CA	1.2 Decimal Number	
2	CA	\$ Fixed decimal number	
3	CA	123 Whole Number	
4	CA	% Percentage	
5	CA	Date/Time	
6	CA	Date	
7	CA	Time	
8	CA	Date/Time/Timezone	
9	CA	Duration	
10	CA	Text	
11	CA	True/False	
12	CA	Binary	
13	CA	Using Locale...	
14	CA		50 00
15	CA		50 00
16	CA		50 00
17	CA		50 00
18	CA		50 00

Query Settings

PROPERTIES

Name: Geography
All Properties

APPLIED STEPS

Source, Navigation, Changed Type, Appended Query, Promoted Headers, Changed Type1, Removed Top Rows

Geography

Column Name	Update Data Type to
SumLevel	Whole Number
LogRecno	Whole Number
State	Whole Number
Country	Whole Number
Place	Whole Number
Memi	Whole Number

Globomantics Customer Analysis - Power Query Editor

File Home Transform Add Column View Tools Help

Close & Apply New Recent Enter Data Data source settings Manage Parameters Refresh Preview Advanced Editor Properties Manage Columns Manage Rows Sort Split Column Group By Data Type: Whole Number Use First Row as Headers Replace Values Combine Text Analytics Vision Azure Machine Learning AI Insights

Close New Query Data Sources Parameters Query

Queries [14]

Helper Queries [3]

- Sample File
- Parameter1 (Sample File)
- Transform File
- Transform Sample File

Queries not in model [4]

- CA Geo
- OR Geo
- WA Geo
- State Surveys

Other Queries [6]

- Customer
- Sales
- Geography
- Survey
- Location
- Median Groups

= Table.TransformColumnTypes(#"Promoted Headers",{{"ZCTA5",

	Zip Code	STATE	PLACE	CLASS
1	601	72	358	U1
2	602	72	616	U1
3	602	72	47873	U1
4	603	72	745	U1
5	603	72	9689	U1
6	603	72	68599	U1
7	606	72	51270	U1
8	610	72	2680	U1
9	610	72	27263	U1
10	610	72	42068	U1
11	610	72	43702	U1
12	612	72	3024	U1
13	612	72	3368	U1
14	616	72	4658	U1
15	617	72	5346	U1
16	617	72	9603	U1
17	617	72	30372	U1
18	617	72	35962	U1

Query Settings

PROPERTIES

Name: Location
All Properties

APPLIED STEPS

Source
Promoted Headers
Changed Type

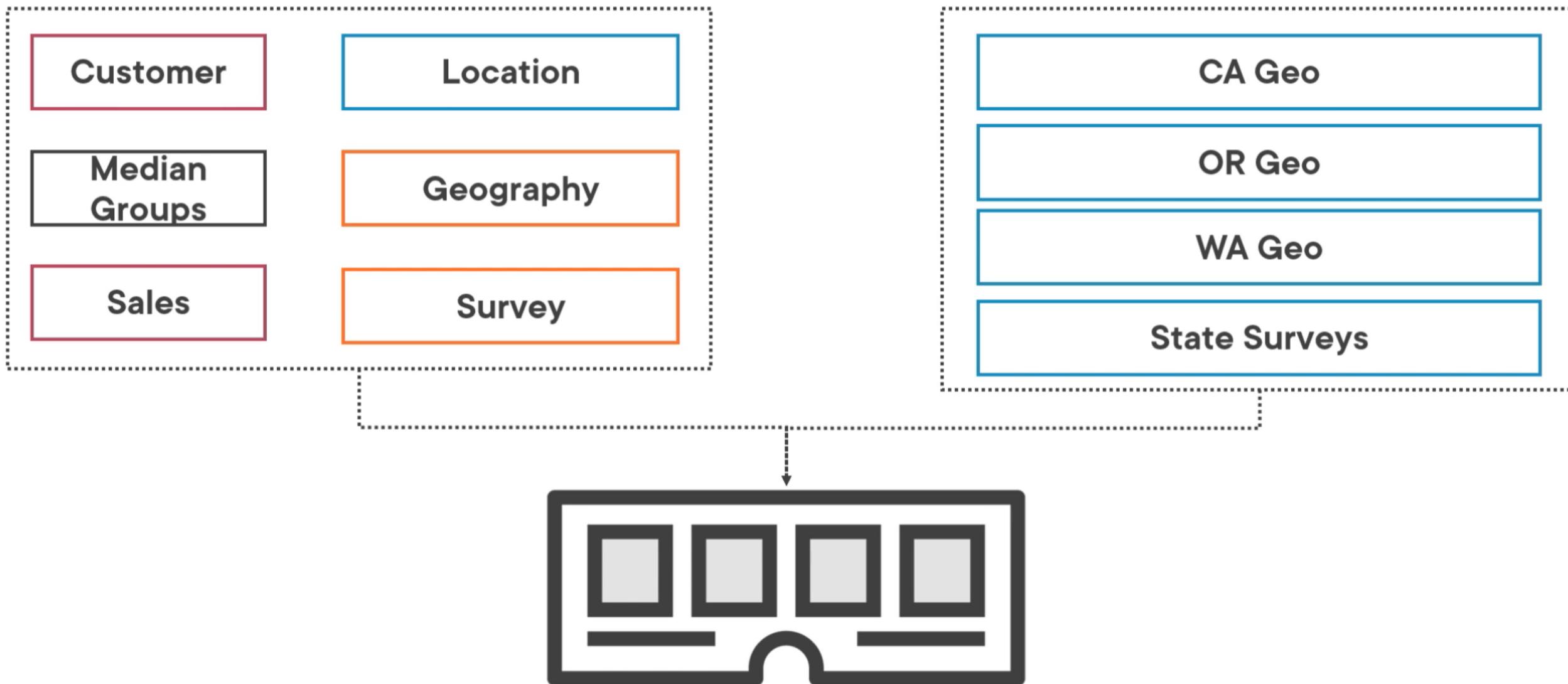
Location Table

Demo

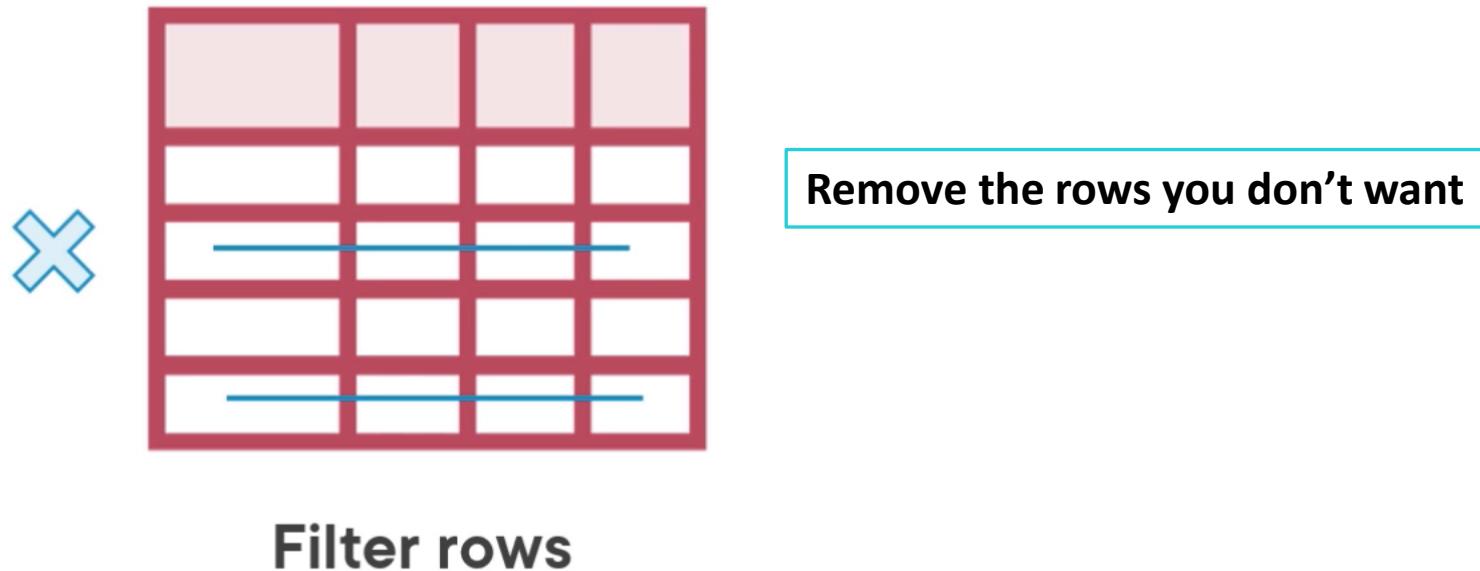


Filter rows

Globomantics Data Assessment



Globomantics Data Assessment



Globomantics Data Assessment

Geography

ABC FILEID	ABC STUSAB	123 SUMLEVEL	ABC COMPONENT	123 LOGRECNO
ACSSF	CA	40 00		1
ACSSF	CA	50 00		13
ACSSF	CA	160 00		53
ACSSF	CA	312 00		189

Globomantics Data Assessment

Remove unneeded rows

Geography

ABC FILEID	ABC STUSAB	123 SUMLEVEL	ABC COMPONENT	123 LOGRECNO
ACSSF	CA	160 00		53

Globomantics Data Assessment

Customer

ABC ...	ABC StateProvinceName	123 ...
...	Nordrhein-Westfalen	...
...	California	...
...	Queensland	...
...	Oregon	...
...	Loiret	...
...	Washington	...

Globomantics Data Assessment

Remove unneeded rows

Customer

ABC ...	ABC StateProvinceName	123 ...
...	California	...
...	Oregon	...
...	Washington	...

Globomantics Customer Analysis - Power Query Editor

File Home Transform Add Column View Tools Help

Close & Apply New Recent Enter Data Data source settings Manage Parameters Refresh Preview Advanced Editor Manage Data Type: Text Use First Row as Headers Combine Text Analytics Vision Azure Machine Learning AI Insights

Close New Query Data Sources Parameters Sort Split Column Group By Replace Values Transform

Queries [14]

Helper Queries [3]

- Sample File
- Parameter1 (Sample File)
- Transform File
- Transform Sample File

Queries not in model [4]

- CA Geo
- OR Geo
- WA Geo
- State Surveys

Other Queries [6]

- Customer
- Sales
- Geography
- Survey
- Location
- Median Groups

= Table.TransformColumnTypes(#"Removed Top Rows",{{"SUMLEVEL",

	A ^B C	GEOID	A ^B C	NAME
1		04000US06		California
2		04001US06		California -- Urban
3		04043US06		California -- Rural
4		040A0US06		California -- In metropolitan or micropolitan statistical area
5		040C0US06		California -- In metropolitan statistical area
6		040C1US06		California -- In metropolitan statistical area -- in principal city
7		040C2US06		California -- In metropolitan statistical area -- not in principal city
8		040E0US06		California -- In micropolitan statistical area
9		040E1US06		California -- In micropolitan statistical area -- in principal city
10		040E2US06		California -- In micropolitan statistical area -- not in principal city
11		040G0US06		California -- Not in metropolitan or micropolitan statistical area
12		040H0US06		California -- Not in metropolitan statistical area
13		05000US06001		Alameda County, California
14		05000US06007		Butte County, California
15		05000US06013		Contra Costa County, California
16		05000US06017		El Dorado County, California
17		05000US06019		Fresno County, California
18		05000US06023		Humboldt County, California

Query Settings

PROPERTIES

Name: Geography
All Properties

APPLIED STEPS

- Source
- Navigation
- Changed Type
- Appended Query
- Promoted Headers
- Changed Type1
- Removed Top Rows
- Changed Type2

Globomantics Customer Analysis - Power Query Editor

File Home Transform Add Column View Tools Help

Close & Apply New Recent Enter Data Data source settings Manage Parameters Refresh Preview Advanced Editor Manage

Manage Columns Reduce Rows Sort Split Column Group By Data Type: Text Use First Row as Headers Replace Values

Close New Query Data Sources Parameters Query Transform Combine Text Analytics Vision Azure Machine Learning AI Insights

Queries [14]

Helper Queries [3]

- Sample File
- Parameter1 (Sample File)
- Transform File
- Transform Sample File

Queries not in model [4]

- CA Geo
- OR Geo
- WA Geo
- State Surveys

Other Queries [6]

- Customer
- Sales
- Geography
- Survey
- Location
- Median Groups

= Table.TransformColumnTypes(#"Removed Top Rows",{{"SUMLEVEL",

	STUSAB	SUMLEVEL	COMPONENT
1	CA		40 00
2	CA		40 01
3	CA		40 43
4	CA		40 A0
5	CA		40 C0
6	CA		40 C1
7	CA		40 C2
8	CA		40 E0
9	CA		40 E1
10	CA		40 E2
11	CA		40 G0
12	CA		40 H0
13	CA		50 00
14	CA		50 00
15	CA		50 00
16	CA		50 00
17	CA		50 00
18	CA		50 00

Query Settings

PROPERTIES

Name: Geography
All Properties

APPLIED STEPS

- Source
- Navigation
- Changed Type
- Appended Query
- Promoted Headers
- Changed Type1
- Removed Top Rows
- Changed Type2

Globomantics Customer Analysis - Power Query Editor

File Home Transform Add Column View Tools Help

Close & Apply New Recent Enter Data Data source settings Manage Parameters Refresh Preview Manage Data Type: Whole Number Use First Row as Headers Replace Values Close New Query Data Sources Parameters Query Sort Split Column Group By Transform Text Analytics Vision Azure Machine Learning AI Insights

Queries [14]

- Helper Queries [3]
 - Sample File
 - Parameter1 (Sample File)
 - Transform File
- Queries not in model [4]
 - CA Geo
 - OR Geo
 - WA Geo
 - State Surveys
- Other Queries [6]
 - Customer
 - Sales
 - Geography
 - Survey
 - Location
 - Median Groups

= Table.TransformColumnTypes(#"Removed Top Rows",{{"SUMLEVEL",

	STUSAB	SUMLEVEL	COMPONENT
1			00
2			01
3			43
4			A0
5			C0
6			C1
7			C2
8			E0
9			E1
10			E2
11			G0
12			H0
13			00
14			00
15			00
16			00
17			00
18			00
19			00

Sort Ascending Sort Descending Clear Sort Clear Filter Remove Empty Number Filters

Search

(Select All)
40
50
160
312
500
795

List may be incomplete. Load more OK Cancel

Query Settings

PROPERTIES

Name: Geography
All Properties

APPLIED STEPS

Source
Navigation
Changed Type
Appended Query
Promoted Headers
Changed Type1
Removed Top Rows
Changed Type2

53 COLUMNS, 999+ ROWS Column profiling based on top 1000 rows PM

Globomantics Customer Analysis - Power Query Editor

File Home Transform Add Column View Tools Help

New Recent Enter Data Data source settings Manage Parameters Refresh Preview Advanced Editor Manage

Close & Apply Close New Query Data Sources Parameters Query

Transform: Data Type: Text ▾ Use First Row as Headers ▾ Replace Values

Text Analytics Vision Azure Machine Learning AI Insights

Queries [14]

Helper Queries [3]

- Sample File
- Parameter1 (Sample)
- Transform File
- Transform Sample File

Queries not in model [4]

- CA Geo
- OR Geo
- WA Geo
- State Surveys

Other Queries [6]

- Customer
- Sales
- Geography
- Survey
- Location
- Median Groups

StateProvinceName PostalCode CountryRegionName

StateProvinceName	PostalCode	CountryRegionName
California	42651	Germany
Oregon	3198	Australia
Washington	LN	Australia
	94519	United Kingdom
	2065	Australia
	4169	Australia
	3198	Australia
	90210	United States
	4700	Australia
	93400	France
	3198	Australia
	93500	France
	22001	Germany
	3280	Australia
	38231	Germany

Sort Ascending Sort Descending Clear Sort Clear Filter Remove Empty Text Filters

Search

(Select All) California England Essonne

List may be incomplete. Load more OK Cancel

Query Settings

PROPERTIES

Name: Customer
All Properties

APPLIED STEPS

Source Navigation

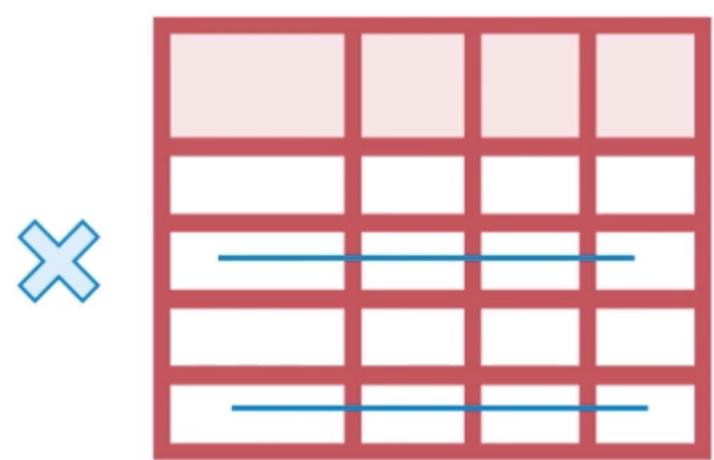
PREVIEW DOWNLOADED AT 2:50 PM

Demo

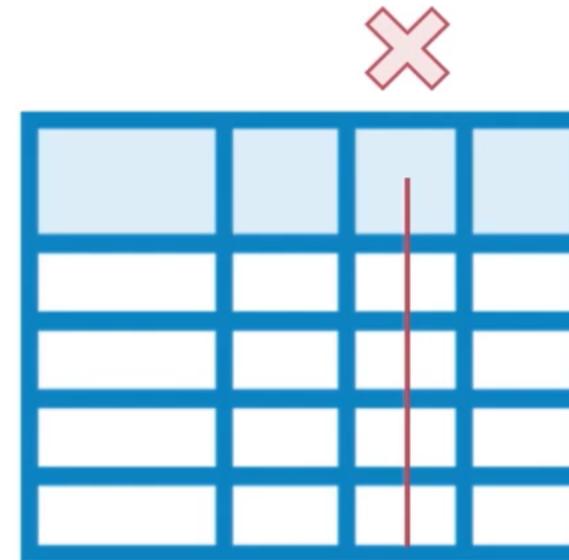


Eliminate columns

Globomantics Data Assessment



Filter rows



Eliminate columns

Remove Below Columns from Geography

- FILEID
- STUSAB
- SUMLEVEL
- COMPONENT
- US
- REGION
- DIVISION
- STATE CE
- COUNTY
- COUSUB
- TRACT GEOID ALL COLUMNS
- BTTR
- BTBG
- BLANK_6

Keep these 4 columns only

- LOGRECNO
- STATE
- PLACE
- NAME

Globomantics Customer Analysis - Power Query Editor

File Home Transform Add Column View Tools Help

Close & Apply New Recent Enter Data Data source settings Manage Parameters Refresh Preview Advanced Editor Manage Data Type: Text Use First Row as Headers Combine Text Analytics Vision Azure Machine Learning AI Insights Close New Query Data Sources Parameters Query Sort Split Column Group By Replace Values

Queries [14]

Helper Queries [3]

- Sample File
- Parameter1 (Sample File)
- Transform File
- Transform Sample File

Queries not in model [4]

- CA Geo
- OR Geo
- WA Geo
- State Surveys

Other Queries [6]

- Customer
- Sales
- Geography
- Survey
- Location
- Median Groups

= Table.SelectRows(#"Changed Type2", each ([SUMLEVEL] = 160))

FILEID	STUSAB	SUMLEVEL
1	CA	
2	CA	
3	CA	
4	CA	
5	CA	
6	CA	
7	CA	
8	CA	
9	CA	
10	CA	
11	CA	
12	CA	
13	CA	
14	CA	
15	CA	
16	CA	
17	CA	
18	CA	

Query Settings

PROPERTIES

Name: Geography

All Properties

APPLIED STEPS

- Source
- Navigation
- Changed Type
- Appended Query
- Promoted Headers
- Changed Type1
- Removed Top Rows
- Changed Type2
- Filtered Rows

Globomantics Customer Analysis - Power Query Editor

File Home Transform Add Column View Tools Help

Close & Apply New Recent Enter Data Data source settings Manage Parameters Refresh Preview Manage Data Type: Any Use First Row as Headers Replace Values Close New Query Data Sources Parameters Query Sort Split Column Group By Transform Combine Text Analytics Vision Azure Machine Learning AI Insights

Queries [14]

- Helper Queries [3]
 - Sample File
 - Parameter1 (Sample File)
 - Transform File
 - Transform Sample File
- Queries not in model [4]
 - CA Geo
 - OR Geo
 - WA Geo
 - State Surveys
- Other Queries [6]
 - Customer
 - Sales
 - Geography
 - Survey
 - Location
 - Median Groups

= Table.SelectRows(#"Changed Type2", each ([SUMLEVEL] = 160))

	STUSAB	SUMLEVEL
1	CA	160
2	CA	160
3	CA	160
4	CA	160
5	CA	160
6	CA	160
7	CA	160
8	CA	160
9	CA	160
10	CA	160
11	CA	160
12	CA	160
13	CA	160
14	CA	160
15	CA	160
16	CA	160
17	CA	160
18	CA	160

Hold the Shift key to multi-select columns

Query Settings

PROPERTIES

Name: Geography
All Properties

APPLIED STEPS

Source, Navigation, Changed Type, Appended Query

53 COLUMNS, 161 ROWS Column profiling based on top 1000 rows 5 PM

- Power Query Editor

View Tools Help

Manage Parameters Refresh Preview Advanced Editor Properties Manage Columns Reduce Rows Sort Split Column Group By Data Type: Any Use First Row as Replace Values

Parameters Query

= Table.1

Choose Columns Remove Columns Manage Columns

	123 SUMLEVEL	ABC
1	CA	160
2	CA	160
3	CA	160

A red arrow points from the "Remove Columns" button in the ribbon to the "Remove Columns" button in the context menu.

Queries [14]

- Transform File from getting started
- Helper Queries [3]
 - Sample File
 - Parameter1 (Sample File)
 - Transform File
- Transform Sample File
- Queries not in model [4]
 - CA Geo
 - OR Geo
 - WA Geo
 - State Surveys
- Other Queries [6]
 - Customer
 - Sales
 - Geography
 - Survey

= Table.RemoveColumns(#"Filtered Rows",

	COMPONENT
1	00
2	00
3	00
4	00
5	00
6	00
7	00
8	00
9	00
10	00
11	00
12	00
13	00
14	00
15	00
16	00

Copy

Remove

Remove Other Columns

Duplicate Column

Add Column From Examples...

Remove Duplicates

Remove Errors

Change Type

Transform

Replace Values...

Replace Errors...

Split Column

Group By...

Fill

Unpivot Columns

Unpivot Other Columns

Unpivot Only Selected Columns

Remove Below Columns from Survey

- FILEID
- FILETYPE
- CHARITER
- SEQUENCE
- REMOVE OTHER COLUMNS

Keep these 4 columns only

- STUSAB
- LOGRECNO
- MEDIAN HOUSEHOLD INCOME IN THE PAST 12 MONTHS **(FIRST COLUMN OF THIS TO BE KEPT)**

Rename

- MEDIAN HOUSEHOLD INCOME IN THE PAST 12 MONTHS **(FIRST COLUMN OF THIS TO BE KEPT)** → MEDIAN HOUSEHOLD INCOME

Remove Below Columns from Location

- Remove all other columns

Keep these 4 columns only

- Zip Code
- State
- Place

Demo



Merge queries

Globomantics Data Assessment

Location

Zip Code	STATE	PLACE
601	72	358
602	72	616
602	72	47873
90001	6	44000
90002	6	44000
90003	6	44574

Geography

LOGRECNO	STATE	PLACE	NAME
110	6	44000	Los Angeles city
111	6	44574	Lynnwood city, California

Globomantics Data Assessment

Merge queries to consolidate data

Location

Zip Code	STATE	PLACE	LOGRECNO	NAME
90001	6	44000	110	Los Angeles city, California
90002	6	44000	110	Los Angeles city, California
90003	6	44574	111	Lynnwood city, California

Globomantics Data Assessment

Customer

Location

Median
Groups

Geography

Survey

Sales

CA Geo

OR Geo

WA Geo

State Surveys

Globomantics Data Assessment

Customer

Location

Median
Groups

Sales

Survey

CA Geo

OR Geo

WA Geo

State Surveys

Geography

Globomantics Customer Analysis - Power Query Editor

File Home Transform Add Column View Tools Help

Close & Apply New Source Recent Sources Enter Data Data source settings Manage Parameters Refresh Preview Advanced Editor Manage Data Type: Whole Number Use First Row as Headers Replace Values Combine Text Analytics Vision Azure Machine Learning AI Insights

Close New Query Data Sources Parameters Sort Split Column Group By Transform

Queries [14]

Helper Queries [3]

- Sample File
- Parameter1 (Sample File)
- Transform File
- Transform Sample File

Queries not in model [4]

- CA Geo
- OR Geo
- WA Geo
- State Surveys

Other Queries [6]

- Customer
- Sales
- Geography
- Survey
- Location
- Median Groups

= Table.RemoveColumns(#"Changed Type1", {"CLASSFP", "GEOID", "PLACE"})

	Zip Code	STATE	PLACE
1	601	72	358
2	602	72	616
3	602	72	47873
4	603	72	745
5	603	72	9689
6	603	72	68599
7	606	72	51270
8	610	72	2680
9	610	72	27263
10	610	72	42068
11	610	72	43702
12	612	72	3024
13	612	72	3368
14	616	72	4658
15	617	72	5346
16	617	72	9603
17	617	72	30372
18	617	72	35962
19	617	72	82125

Merge Queries Append Queries Combine Files Combine Location All Properties

APPLIED STEPS

- Source
- Promoted Headers
- Changed Type
- Renamed Columns
- Changed Type1
- Removed Columns

3 COLUMNS, 999+ ROWS Column profiling based on top 1000 rows 1 PM

Globomantics Custom

File Home Transform

Close & Apply New Recent Enter Source Sources Data Close New Query

Queries [14]

- Helper Queries [3]
 - Sample File
 - Parameter1 (Sample File)
 - Transform File
- Transform Sample File
- Queries not in model [4]
 - CA Geo
 - OR Geo
 - WA Geo
 - State Surveys
- Other Queries [6]
 - Customer
 - Sales
 - Geography
 - Survey
 - Location
 - Median Groups

Merge

Select a table and matching columns to create a merged table.

Location

Zip Code	STATE	PLACE
601	72	358
602	72	616
602	72	47873
603	72	745
603	72	9689

Geography

LOGRECNO	STATE	PLACE	NAME
53	6	562	Alameda city, California
54	6	884	Alhambra city, California
55	6	2000	Anaheim city, California
56	6	2252	Antioch city, California
57	6	2364	Apple Valley town, California

Join Kind

Left Outer (all from first, matching from second)

Use fuzzy matching to perform the merge

Fuzzy matching options

OK Cancel

Text Analytics
Vision
Combine
Azure Machine Learning
AI Insights

Properties

Steps

Resource
Promoted Headers
Changed Type
Renamed Columns
Changed Type1
Moved Columns

PREVIEW DOWNLOADED AT 4:10 PM

Globomantics Custom

File Home Transform

Close & Apply New Recent Enter Source Sources Data Close New Query

Queries [14]

- Helper Queries [3]
 - Sample File
 - Parameter1 (Sample File)
 - Transform File
- Transform Sample File
- Queries not in model [4]
 - CA Geo
 - OR Geo
 - WA Geo
 - State Surveys
- Other Queries [6]
 - Customer
 - Sales
 - Geography
 - Survey
 - Location
 - Median Groups

Merge

Select a table and matching columns to create a merged table.

Location

Zip Code	STATE 1	PLACE 2
601	72	358
602	72	616
602	72	47873
603	72	745
603	72	9689

Geography

LOGRECNO	STATE 1	PLACE 2	NAME
53	6	562	Alameda city, California
54	6	884	Alhambra city, California
55	6	2000	Anaheim city, California
56	6	2252	Antioch city, California
57	6	2364	Apple Valley town, California

Join Kind

Inner (only matching rows)

Use fuzzy matching to perform the merge

Fuzzy matching options

The selection matches 1342 of 50404 rows from the first table, and 160 of...

OK Cancel

Text Analytics Vision Azure Machine Learning AI Insights

PREVIEW DOWNLOADED AT 4:10 PM

Queries [14]

- Transform File from getting started
- Helper Queries [3]
 - Sample File
 - Parameter1 (Sample File)
 - Transform File
- Transform Sample File
- Queries not in model [4]
 - CA Geo
 - OR Geo
 - WA Geo
 - State Surveys
- Other Queries [6]
 - Customer
 - Sales
 - Geography
 - Survey
 - Location
 - Median Groups

= Table.NestedJoin(#"Removed Columns", {"STATE", "PLACE"},

1 STATE

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

1 Geography

Search Columns to Expand

Expand Aggregate

(Select All Columns)

LOGRECNO

STATE

PLACE

NAME

Use original column name as prefix

OK Cancel

6 44000 Table

When we merge

New column added to
Location table

Now click on the top right
Icon then select the
columns

You want to merge/add to
Location query/table

Close New Query Data Sources Parameters Query

Queries [14]

- Transforming from getting started

Helper Queries

- Sample
- Parameters
- Transform
- Transform

Queries no

- CA Geo
- OR Geo
- WA Geo
- State Survey

Other Queries

- Customer
- Sales
- Geography
- Survey
- Location
- Median G

5 COLUMNS, 999+ ROWS

= Table.ExpandTable

Zip Code 123 STATE

A Z Sort Ascending A Z Sort Descending

Clear Sort

Clear Filter

Remove Empty

Text Filters

Search

(Select All) 90001 90002 90003 90004 90005 90006

! List may be incomplete. Load more

OK Cancel

A large teal arrow points to the 'Sort Ascending' option in the context menu.

Zip Code	STATE
90001	CA
90002	CA
90003	CA
90004	CA
90005	CA
90006	CA
.....

We need to remove duplicate entries in the data

Globomantics Customer Analysis - Power Query Editor

File Home Transform Add Column View Tools Help

Close & Apply New Recent Enter Data Data source settings Manage Parameters Refresh Preview Advanced Editor Manage Data Type: Any Use First Row as Headers Combine Text Analytics Vision Azure Machine Learning AI Insights Close New Query Data Sources Parameters Sort Split Column Group By Replace Values

Queries [14]

- Helper Queries [3]
 - Sample File
 - Parameter1 (Sample File)
 - Transform File
- Queries not in model [4]
 - CA Geo
 - OR Geo
 - WA Geo
 - State Surveys
- Other Queries [6]
 - Customer
 - Sales
 - Geography
 - Survey
 - Location
 - Median Groups

= Table.Sort(#"Expanded Geography",{{"Zip Code",

	Zip Code	STATE	PLACE	Geogra
23	90024			44000
26	90025			44000
27	90026			44000
28	90027			44000
29	90028			44000
30	90029			44000
31	90031			44000
32	90032			20802
33	90032			44000
34	90033			44000
35	90034			
36	90035			
37	90036			

We can remove the applied steps in Power Query Editor.

Now First Remove the “Sort Step”

Query Settings

PROPERTIES

Name: Location
All Properties

APPLIED STEPS

Source, Promoted Headers, Changed Type, Renamed Columns, Changed Type1, Removed Columns, Merged Queries, Expanded Geography, Sorted Rows

5 COLUMNS, 999+ ROWS Column profiling based on top 1000 rows 1 PM

Globomantics Customer Analysis - Power Query Editor

File Home Transform Add Column View Tools Help

Close & Apply New Recent Enter Data Data source settings Manage Parameters Refresh Preview Advanced Editor Manage Columns Manage Rows Sort Split Column Group By Data Type: Text Use First Row as Headers Replace Values Close New Query Data Sources Parameters Query Transform Combine Text Analytics Vision Azure Machine Learning AI Insights

Queries [14]

- Helper Queries [3]
 - Sample File
 - Parameter1 (Sample File)
 - Transform File
- Queries not in model [4]
 - CA Geo
 - OR Geo
 - WA Geo
 - State Surveys
- Other Queries [6]
 - Customer
 - Sales
 - Geography
 - Survey
 - Location
 - Median Groups

= Table.ExpandTable

	Zip Code	STATE	PLACE	Geogra
1	90001			44000
2	90002			44000
3	90002			44574
4	90003			44000
5	90004			44000
6	90005			44000
7	90006			44000
8	90007			44000
9	90008			44000
10	90010			44000
11	90011			44000
12	90012			44000
13	90013			44000
14	90014			44000
15	90015			44000
16	90016			44000
17	90017			44000
18	90018			44000

Keep Rows Remove Rows

Remove Top Rows
Remove Bottom Rows
Remove Alternate Rows
Remove Duplicates
Remove Blank Rows
Remove Errors

Query Settings

PROPERTIES

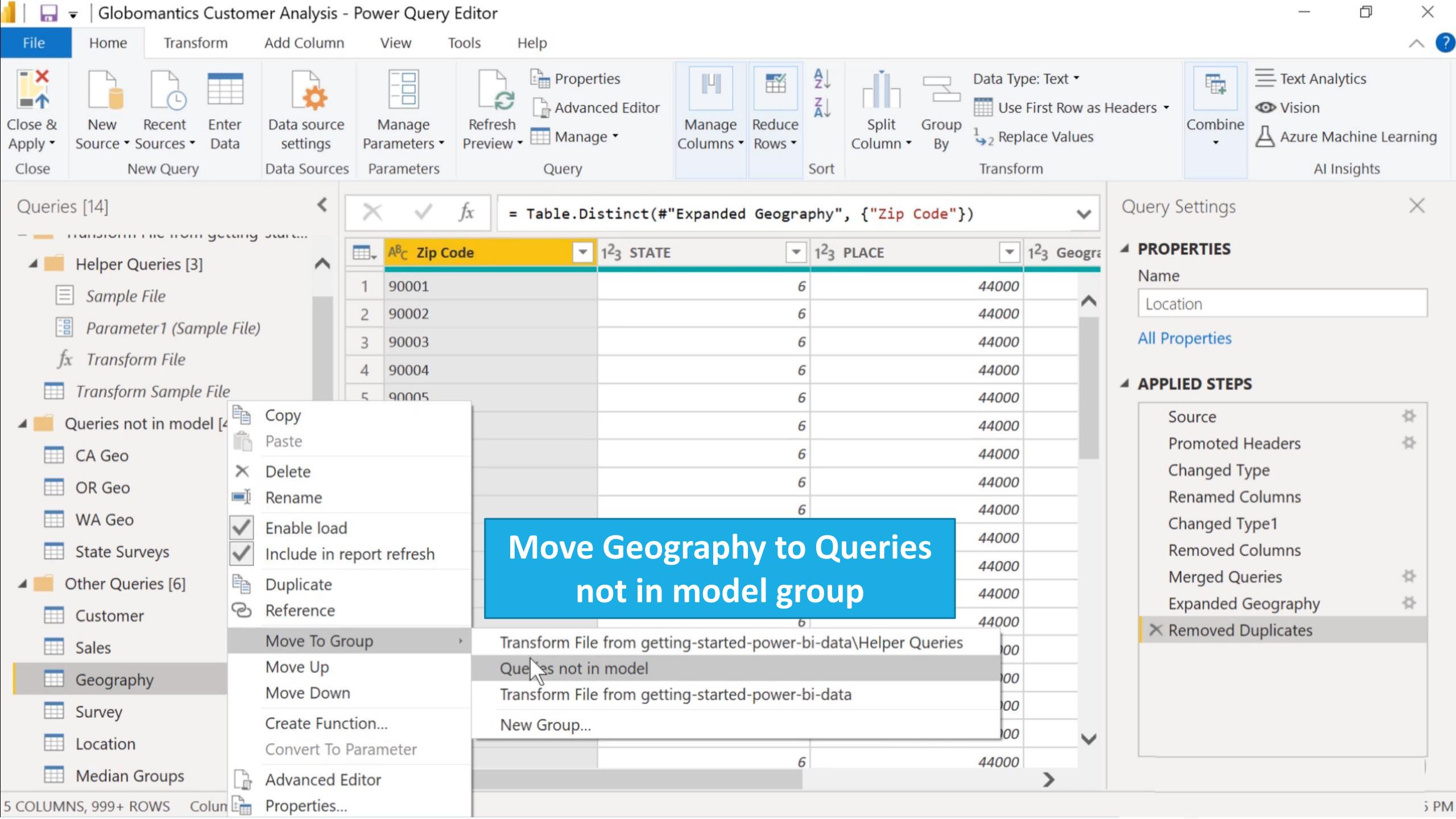
Name: Location
All Properties

APPLIED STEPS

Source
Promoted Headers
Changed Type
Renamed Columns
Changed Type1
Removed Columns
Merged Queries
Expanded Geography

5 COLUMNS, 999+ ROWS Column profiling based on top 1000 rows

1 PM



Globomantics Data Assessment

Merge queries to filter rows

Customer: 7,803 rows

Sales: 60.398 rows

Before

Customer: 7,803 rows

Sales: 21,225 rows

After

Demo



Merge queries

Globomantics Customer Analysis - Power Query Editor

File Home Transform Add Column View Tools Help

Close & Apply New Recent Enter Data Data source settings Manage Parameters Refresh Preview Manage Data Type: Whole Number Use First Row as Headers Replace Values Combine Text Analytics Vision Azure Machine Learning AI Insights

Close New Query Data Sources Parameters Query Sort Transform

Queries [14]

Helper Queries [3]

- Sample File
- Parameter1 (Sample File)
- Transform File
- Transform Sample File

Queries not in model [5]

- CA Geo
- OR Geo
- WA Geo
- State Surveys
- Geography

Other Queries [5]

- Customer
- Sales
- Survey
- Location
- Median Groups

= Source{[Schema="",Item="Sales"]}[Data]

BusinessEntityID	SalesOrderNumber	SalesOrderDetail
1	14078	SO43697
2	15519	SO43698
3	10553	SO43699
4	11211	SO43700
5	11358	SO43701
6	13514	SO43702
7	14897	SO43703
8	6990	SO43704
9	18258	SO43705
10	4229	SO43706
11	11853	SO43707
12	9374	SO43708
13	4916	SO43709
14	16362	SO43710
15	9351	SO43711
16	12797	SO43712
17	2835	SO43713
18	6134	SO43714

Merge Queries Append Queries Combine Files Combine Sales All Properties

APPLIED STEPS

- Source
- Navigation

7 COLUMNS, 999+ ROWS Column profiling based on top 1000 rows 1 PM

Globomantics Custom

File Home Transform

Close & Apply New Recent Enter Source Sources Data Close New Query

Queries [14]

- Helper Queries [3]
 - Sample File
 - Parameter1 (Sample File)
 - Transform File
- Transform Sample File
- Queries not in model [5]
 - CA Geo
 - OR Geo
 - WA Geo
 - State Surveys
 - Geography
- Other Queries [5]
 - Customer
 - Sales
 - Survey
 - Location
 - Median Groups

Merge

Select a table and matching columns to create a merged table.

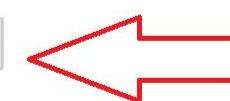
Sales

BusinessEntityID	SalesOrderNumber	SalesOrderDetail	OrderDate	Product	ProductC
14078	SO43697	353	5/31/2011 12:00:00 AM	Road-150 Red, 62	Bikes
15519	SO43698	354	5/31/2011 12:00:00 AM	Mountain-100 Silver, 44	Bikes
10553	SO43699	355	5/31/2011 12:00:00 AM	Mountain-100 Silver, 44	Bikes
11211	SO43700	356	5/31/2011 12:00:00 AM	Road-650 Black, 62	Bikes

Customer

BusinessEntityID	Title	FirstName	MiddleName	LastName	Suffix	PhoneNumber	PhoneNumberTyp
1705	Mr.	Eric	null	Rothenberg	null	326-555-0100	Home
1709	Mr.	Luke	J.	Roy	null	583-555-0100	Home
1725	Mr.	Thomas	T.	Sanchez	Jr.	127-555-0100	Cell
1739	Mr.	Mike	null	Seamans	null	210-555-0100	Home

Join Kind

Inner (only matching rows) 

Use fuzzy matching to perform the merge

Fuzzy matching options

The selection matches 21225 of 60398 rows from the first table, and 7803...

OK Cancel

Text Analytics
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Properties

STEPS

Source Navigation

Globomantics Customer Analysis - Power Query Editor

File Home Transform Add Column View Tools Help

Close & Apply New Recent Enter Data Data source settings Manage Parameters Refresh Preview Advanced Editor Manage Sort Data Type: Table Use First Row as Headers Replace Values Combine Text Analytics Vision Azure Machine Learning AI Insights

Close New Query Data Sources Parameters Query

Queries [14]

Helper Queries [3]

- Sample File
- Parameter1 (Sample File)
- Transform File
- Transform Sample File

Queries not in model [5]

- CA Geo
- OR Geo
- WA Geo
- State Surveys
- Geography

Other Queries [5]

- Customer
- Sales
- Survey
- Location
- Median Groups

= Table.NestedJoin(_Sales, {"BusinessEntityID"}, Customer,)

ProductCategory SalesAmount Customer

	ABC	\$	Customer
1	Bikes	3,399.99	Table
2	Bikes	699.10	Table
3	Bikes	3,578.27	Table
4	Bikes	2,049.10	Table
5	Bikes	2,071.42	Table
6	Bikes	3,578.27	Table
7	Bikes	3,578.27	Table
8	Bikes	3,578.27	Table
9	Bikes	3,578.27	Table
10	Bikes	3,578.27	Table
11	Bikes	3,578.27	Table
12	Bikes	3,578.27	Table
13	Bikes	3,578.27	Table
14	Bikes	3,578.27	Table
15	Bikes	3,578.27	Table
16	Bikes	782.99	Table
17	Bikes	699.10	Table
18	Bikes	699.10	Table

PROPERTIES

- Copy
- Remove
- Remove Other Columns
- Duplicate Column
- Add Column From Examples...
- Remove Errors
- Replace Errors...
- Fill
- Unpivot Columns
- Unpivot Other Columns
- Unpivot Only Selected Columns
- Rename...
- Move
- Drill Down
- Add as New Query

8 COLUMNS, 999+ ROWS Column profiling based on top 1000 rows

Demo



Split column by delimiter

Split column by number of characters

Globomantics Data Assessment

Location

Zip Code	STATE	PLACE	LOGRECNO	NAME
90001	6	44000	110	Los Angeles city, California
90002	6	44000	110	Los Angeles city, California
90003	6	44574	111	Lynnwood city, California

Globomantics Data Assessment

Split column by delimiter

Location

Zip Code	STATE	PLACE	LOGRECNO	NAME	STATE
90001	6	44000	110	Los Angeles city	California
90002	6	44000	110	Los Angeles city	California
90003	6	44574	111	Lynnwood city	California

Globomantics Data Assessment

Split column by number of characters

Location

Zip Code	STATE	PLACE	LOGRECNO	NAME	STATEAB
90001	6	44000	110	Los Angeles city	Ca
90002	6	44000	110	Los Angeles city	Ca
90003	6	44574	111	Lynnwood city	Ca

Globomantics Customer Analysis - Power Query Editor

File Home Transform Add Column View Tools Help

Close & Apply New Source Recent Sources Enter Data Data source settings Manage Parameters Refresh Preview Advanced Editor Manage Data Type: Text Use First Row as Headers Replace Values Combine Text Analytics Vision Azure Machine Learning AI Insights

Close New Query Data Sources Parameters Sort Transform

Queries [14]

Helper Queries [3]

- Sample File
- Parameter1 (Sample File)
- Transform File
- Transform Sample File

Queries not in model [5]

- CA Geo
- OR Geo
- WA Geo
- State Surveys
- Geography

Other Queries [5]

- Customer
- Sales
- Survey
- Location
- Median Groups

= Table.Distinct(#"Expanded Geography", {"Zip Code"})

Query Settings

PLACE Geography.LOGRECNO Geography.NAM

PLACE	LOGRECNO	NAM
1	44000	110 Los Angeles city, Cal
2	44000	110 Los Angeles city, Cal
3	44000	110 Los Angeles city, Cal
4	44000	110 Los Angeles city, Cal
5	44000	110 Los Angeles city, Cal
6	44000	110 Los Angeles city, Cal
7	44000	110 Los Angeles city, Cal
8	44000	110 Los Angeles city, Cal
9	44000	110 Los Angeles city, Cal
10	44000	110 Los Angeles city, Cal
11	44000	110 Los Angeles city, Cal
12	44000	110 Los Angeles city, Cal
13	44000	110 Los Angeles city, Cal
14	44000	110 Los Angeles city, Cal
15	44000	110 Los Angeles city, Cal
16	44000	110 Los Angeles city, Cal
17	44000	110 Los Angeles city, Cal
18	44000	110 Los Angeles city, Cal

Copy Remove Remove Other Columns Duplicate Column Add Column From Examples... Remove Duplicates Remove Errors Change Type Transform Replace Values... Replace Errors... Split Column Group By... Fill Unpivot Columns Unpivot Other Columns Unpivot Only Selected Columns Rename... Move Drill Down Add as New Query

5 COLUMNS, 999+ ROWS Column profiling based on top 1000 rows

Globomantics Customer Analysis - Power Query Editor

File Home Transform Add Column View Tools Help

New Recent Sources Data Enter Advanced Editor Properties Data Type: Text Use First Row as Headers

Close & Apply Close New Query

Queries [14]

- Helper Queries [3]
 - Sample File
 - Parameter1 (Sample File)
 - Transform File
- Transform Sample File
- Queries not in model [5]
 - CA Geo
 - OR Geo
 - WA Geo
 - State Surveys
 - Geography
- Other Queries [5]
 - Customer
 - Sales
 - Survey
 - Location
 - Median Groups

Split Column by Delimiter

Specify the delimiter used to split the text column.

Select or enter delimiter

--Custom--
,

Split at

Left-most delimiter
 Right-most delimiter
 Each occurrence of the delimiter

Advanced options

Quote Character

"

Split using special characters

Insert special character

OK Cancel

Text Analytics Vision Azure Machine Learning AI Insights

Properties

Steps

Source Promoted Headers Merged Type Merged Columns Merged Type1 Merged Columns Merged Queries Merged Geography Merged Duplicates

Globomantics Customer Analysis - Power Query Editor

File Home Transform Add Column View Tools Help

Close & Apply New Recent Enter Data **Data source settings** Manage Parameters Refresh Preview **Properties** Advanced Editor **Manage** **Manage Columns** **Reduce Rows** **Sort** **Data Type: Text** **Use First Row as Headers** **Replace Values**

Close New Query **Data Sources** **Parameters** **Query** **Transform** **Combine** **Text Analytics** **Vision** **Azure Machine Learning** **AI Insights**

Queries [14]

- Helper Queries [3]
 - Sample File
 - Parameter1 (Sample File)
 - Transform File
- Queries not in model [5]
 - CA Geo
 - OR Geo
 - WA Geo
 - State Surveys
 - Geography
- Other Queries [5]
 - Customer
 - Sales
 - Survey
 - Location
 - Median Groups

Query Settings

PROPERTIES

Name: Location
All Properties

APPLIED STEPS

Source, Promoted Headers, Changed Type, Renamed Columns, Changed Type1, Removed Columns, Merged Queries, Expanded Geography, Removed Duplicates, Split Column by Delimiter, **Changed Type2**

= Table.TransformColumnTypes(#"Split Column by Delimiter", {

	1 Geography.LOGRECNO	2 Geography.NAME.1	3 Geography.NAME.2
1	44000	110 Los Angeles city	California
2	44000	110 Los Angeles city	California
3	44000	110 Los Angeles city	California
4	44000	110 Los Angeles city	California
5	44000	110 Los Angeles city	California
6	44000	110 Los Angeles city	California
7	44000	110 Los Angeles city	California
8	44000	110 Los Angeles city	California
9	44000	110 Los Angeles city	California
10	44000	110 Los Angeles city	California
11	44000	110 Los Angeles city	California
12	44000	110 Los Angeles city	California
13	44000	110 Los Angeles city	California
14	44000	110 Los Angeles city	California
15	44000	110 Los Angeles city	California
16	44000	110 Los Angeles city	California
17	44000	110 Los Angeles city	California
18	44000	110 Los Angeles city	California

6 COLUMNS, 999+ ROWS Column profiling based on top 1000 rows

Globomantics Customer Analysis - Power Query Editor

File Home Transform Add Column View Tools Help

Close & Apply New Source Recent Sources Enter Data Data source settings Manage Parameters Refresh Preview Advanced Editor Manage

Manage Columns Reduce Rows Sort Split Column Group By Data Type: Text Use First Row as Headers Replace Values

Combine Text Analytics Vision Azure Machine Learning AI Insights

Queries [14]

Helper Queries [3]

- Sample File
- Parameter1 (Sample File)
- Transform File
- Transform Sample File

Queries not in model [5]

- CA Geo
- OR Geo
- WA Geo
- State Surveys
- Geography

Other Queries [5]

- Customer
- Sales
- Survey
- Location
- Median Groups

6 COLUMNS, 999+ ROWS Column profiling based on top 1000 rows

TransformColumnTypes(#"Split Column by Delimiter",{

CNO	Place Name	Geographic
110	Los Angeles city	Los Angeles city
3	44000	Los Angeles city
4	44000	Los Angeles city
5	44000	Los Angeles city
6	44000	Los Angeles city
7	44000	Los Angeles city
8	44000	Los Angeles city
9	44000	Los Angeles city
10	44000	Los Angeles city
11	44000	Los Angeles city
12	44000	Los Angeles city
13	44000	Los Angeles city
14	44000	Los Angeles city
15	44000	Los Angeles city
16	44000	Los Angeles city
17	44000	Los Angeles city
18	44000	Los Angeles city

Copy Remove Remove Other Columns Duplicate Column Add Column From Examples... Remove Duplicates Remove Errors Change Type Transform Replace Values... Replace Errors... Split Column Group By... Fill Unpivot Columns Unpivot Other Columns Unpivot Only Selected Columns Rename... Move Drill Down Add as New Query

Query Settings

PROPERTIES

Name: Location
All Properties

APPLIED STEPS

- Source
- Promoted Headers
- Changed Type
- Renamed Columns
- Changed Type1
- Removed Columns
- Merged Queries
- Expanded Geography
- Removed Duplicates
- Split Column by Delimiter
- Changed Type2

5 PM



Queries [14]

- Helper Queries [3]
 - Sample File
 - Parameter1 (Sample File)
 - Transform File
- Queries not in model [5]
 - CA Geo
 - OR Geo
 - WA Geo
 - State Surveys
 - Geography
- Other Queries [5]
 - Customer
 - Sales
 - Survey
 - Location
 - Median Groups

= Table.RenameColumns(#"Changed Type2",{{"Geography.NAME.1",

	1	2	3	Geography.LOGRECNO	A ^B C Place Name	A ^B C StateAB
1	44000			110	Los Angeles city	California
2	44000			110	Los Angeles city	California
3	44000			110	Los Angeles city	California
4	44000			110	Los Angeles city	California
5	44000			110	Los Angeles city	California
6	44000			110	Los Angeles city	California
7	44000			110	Los Angeles city	California
8	44000			110	Los Angeles city	California
9	44000			110	Los Angeles city	California
10	44000			110	Los Angeles city	California
11	44000			110	Los Ang	By Delimiter...
12	44000			110	Los	By Number of Characters...
13	44000			110	Los Ang	By Positions...
14	44000			110	Los Ang	By Lowercase to Uppercase
15	44000			110	Los Ang	By Uppercase to Lowercase
16	44000			110	Los Ang	By Digit to Non-Digit
17	44000			110	Los Ang	By Non-Digit to Digit
18	44000			110	Los Angeles city	California

Query Settings

- Copy
- Remove
- Remove Other Columns
- Duplicate Column
- Add Column From Examples...
- Remove Duplicates
- Remove Errors
- Change Type
- Transform
- Replace Values...
- Replace Errors...
- Split Column
- Group By...
- Fill
- Unpivot Columns
- Unpivot Other Columns
- Unpivot Only Selected Columns
- Rename...
- Move
- Drill Down

X

Split Column by Number of Characters

Specify the number of characters used to split the text column.

Number of characters

2

Split

- Once, as far left as possible
- Once, as far right as possible
- Repeatedly

► Advanced options

OK

Cancel

Rename to StateAB , Remove StateAB.2

Queries [14]

- Helper Queries [3]
 - Sample File
 - Parameter1 (Sample File)
 - Transform File
- Queries not in model [5]
 - CA Geo
 - OR Geo
 - WA Geo
 - State Surveys
 - Geography
- Other Queries [5]
 - Customer
 - Sales
 - Survey
 - Location
 - Median Groups

= Table.TransformColumnTypes(#"Split Column by Position",{

LOGRECNO	Place Name	StateAB.1	StateAB.2
1	110 Los Angeles city	Ca	lifornia
2	110 Los Angeles city	Ca	lifornia
3	110 Los Angeles city	Ca	lifornia
4	110 Los Angeles city	Ca	lifornia
5	110 Los Angeles city	Ca	lifornia
6	110 Los Angeles city	Ca	lifornia
7	110 Los Angeles city	Ca	lifornia
8	110 Los Angeles city	Ca	lifornia
9	110 Los Angeles city	Ca	lifornia
10	110 Los Angeles city	Ca	lifornia
11	110 Los Angeles city	Ca	lifornia
12	110 Los Angeles city	Ca	lifornia
13	110 Los Angeles city	Ca	lifornia
14	110 Los Angeles city	Ca	lifornia
15	110 Los Angeles city	Ca	lifornia
16	110 Los Angeles city	Ca	lifornia
17	110 Los Angeles city	Ca	lifornia
18	110 Los Angeles city	Ca	lifornia

Demo



Split XML

Globomantics Data Assessment

Customer

...	Demographics
...	<IndividualSurvey...><TotalPurchaseYTD>1651</TotalPurchaseYTD><DateFirstPurchase>2003-10-29Z</DateFirstPurchase><BirthDate>1968-10-07Z</BirthDate><MaritalStatus>S</MaritalStatus><YearlyIncome>50001-75000</YearlyIncome>...
...	<IndividualSurvey..."><TotalPurchaseYTD>39.01</TotalPurchaseYTD><DateFirstPurchase>2004-05-18Z</DateFirstPurchase><BirthDate>1963-09-03Z</BirthDate><MaritalStatus>S</MaritalStatus><YearlyIncome>75001-100000</YearlyIncome>...

Globomantics Data Assessment

Split XML

Customer

...	Marital Status	YearlyIncome	Gender	TotalChildren	...
...	S	50001	F	2	...
...	S	75001	M	0	...

Queries [14]

- ▶  Helper Queries [3]
 -  Sample File
 -  Parameter1 (Sample File)
 -  Transform File
 - ▶  Queries not in model [5]
 -  CA Geo
 -  OR Geo
 -  WA Geo
 -  State Surveys
 -  Geography
 - ▶  Other Queries [5]
 -  Customer
 -  Sales
 -  Survey
 -  Location
 -  Median Groups

= Table.SelectRows(_Customer, each ([StateProvinceName] =

	A ^B C CountryRegionName	A ^B C Demographics
1	United States	<IndividualSurvey xmlns="http://schemas.microsoft.com/sqlserver/20...
2	United States	<IndividualSurvey xmlns="http://schemas.microsoft.com/sqlserver/20...
3	United States	<IndividualSurvey xmlns="http://schemas.microsoft.com/sqlserver/20...
4	United States	<IndividualSurvey xmlns="http://schemas.microsoft.com/sqlserver/20...
5	United States	<IndividualSurvey xmlns="http://schemas.microsoft.com/sqlserver/20...
6	United States	<IndividualSurvey xmlns="http://schemas.microsoft.com/sqlserver/20...
7	United States	<IndividualSurvey xmlns="http://schemas.microsoft.com/sqlserver/20...
8	United States	<IndividualSurvey xmlns="http://schemas.microsoft.com/sqlserver/20...
9	United States	<IndividualSurvey xmlns="http://schemas.microsoft.com/sqlserver/20...
10	United States	<IndividualSurvey xmlns="http://schemas.microsoft.com/sqlserver/20...
11	United States	<IndividualSurvey xmlns="http://schemas.microsoft.com/sqlserver/20...
12	United States	<IndividualSurvey xmlns="http://schemas.microsoft.com/sqlserver/20...
13	United States	<IndividualSurvey xmlns="http://schemas.microsoft.com/sqlserver/20...
14	United States	<IndividualSurvey xmlns="http://schemas.microsoft.com/sqlserver/20...
15	United States	<IndividualSurvey xmlns="http://schemas.microsoft.com/sqlserver/20...
16	United States	<IndividualSurvey xmlns="http://schemas.microsoft.com/sqlserver/20...
17	United States	<IndividualSurvey xmlns="http://schemas.microsoft.com/sqlserver/20...
18	United States	<IndividualSurvey xmlns="http://schemas.microsoft.com/sqlserver/20...
19		

Query Settings

◀ PROPERTIES

Nan

Customer

► APPLIED STEPS

Source

Navigation

 Filtered Rows

= Table.SelectRows(_Customer, each ([StateProvinceName] =

	A ^B _C CountryRegionName	A ^B _C Demographics
1	United States	<IndividualSurvey xmlns="http://schemas.microsoft.com/sqlserver/20...
2	United States	<IndividualSurvey xmlns="http://schemas.microsoft.com/sqlserver/20...
3	United States	<IndividualSurvey xmlns="http://schemas.microsoft.com/sqlserver/20...
4	United States	<IndividualSurvey xmlns="http://schemas.microsoft.com/sqlserver/20...
5	United States	<IndividualSurvey xmlns="http://schemas.microsoft.com/sqlserver/20...
6	United States	<IndividualSurvey xmlns="http://schemas.microsoft.com/sqlserver/20...
7	United States	<IndividualSurvey xmlns="http://schemas.microsoft.com/sqlserver/20...
8	United States	<IndividualSurvey xmlns="http://schemas.microsoft.com/sqlserver/20...
9	United States	<IndividualSurvey xmlns="http://schemas.microsoft.com/sqlserver/20...
10	United States	<IndividualSurvey xmlns="http://schemas.microsoft.com/sqlserver/20...
11	United States	<IndividualSurvey xmlns="http://schemas.microsoft.com/sqlserver/20...
12	United States	<IndividualSurvey xmlns="http://schemas.microsoft.com/sqlserver/20...
13		<IndividualSurvey xmlns="http://schemas.microsoft.com/sqlserver/2004/07/adventure-works/IndividualSurvey"><TotalPurchaseYTD>1651</TotalPurchaseYTD><DateFirstPurchase>2003-10-29Z</DateFirstPurchase><BirthDate>1968-10-07Z</BirthDate><MaritalStatus>S</MaritalStatus><YearlyIncome>50001-75000</YearlyIncome><Gender>F</Gender><TotalChildren>2</TotalChildren><NumberChildrenAtHome>2</NumberChildrenAtHome><EducationLevel>Postgraduate</EducationLevel><Occupation>Skilled...

Queries [14]

Transform file from getting started

Helper Queries [3]

Sample File

Parameter1 (Sample File)

Transform File

Transform Sample File

Queries not in model [5]

CA Geo

OR Geo

WA Geo

State Surveys

Geography

Other Queries [5]

Customer

Sales

Survey

Location

Median Groups

X ✓ fx = Table.SelectRows(_Customer, each ([StateProvinceName] =

	A ^B C CountryRegionName	A ^B C Demographics	
1	United States	<IndividualSurvey xmlns="http://schemas.microsoft.com/crm/2011/02/Contracts">	Copy
2	United States	<IndividualSurvey xmlns="http://schemas.microsoft.com/crm/2011/02/Contracts">	Remove
3	United States	<IndividualSurvey xmlns="http://schemas.microsoft.com/crm/2011/02/Contracts">	Remove Other Columns
4	United States	<IndividualSurvey xmlns="http://schemas.microsoft.com/crm/2011/02/Contracts">	Duplicate Column
5	United States	<IndividualSurvey xmlns="http://schemas.microsoft.com/crm/2011/02/Contracts">	Add Column From Examples...
6	United States	<IndividualSurvey xmlns="http://schemas.microsoft.com/crm/2011/02/Contracts">	Remove Duplicates
7	United States	<IndividualSurvey xmlns="http://schemas.microsoft.com/crm/2011/02/Contracts">	Remove Errors
8	United States	<IndividualSurvey xmlns="http://schemas.microsoft.com/crm/2011/02/Contracts">	Change Type
9	United States	<IndividualSurvey xmlns="http://schemas.microsoft.com/crm/2011/02/Contracts">	Transform
10	United States	<IndividualSurvey xmlns="http://schemas.microsoft.com/crm/2011/02/Contracts">	Replace Values...
11	United States	<IndividualSurvey xmlns="http://schemas.microsoft.com/crm/2011/02/Contracts">	Replace Errors...
12	United States	<IndividualSurvey xmlns="http://schemas.microsoft.com/crm/2011/02/Contracts">	Split Column
13	United States	<IndividualSurvey xmlns="http://schemas.microsoft.com/crm/2011/02/Contracts">	Group By...
14	United States	<IndividualSurvey xmlns="http://schemas.microsoft.com/crm/2011/02/Contracts">	Fill
15	United States	<IndividualSurvey xmlns="http://schemas.microsoft.com/crm/2011/02/Contracts">	Unpivot Columns
16	United States	<IndividualSurvey xmlns="http://schemas.microsoft.com/crm/2011/02/Contracts">	Unpivot Other Columns
17	United States	<IndividualSurvey xmlns="http://schemas.microsoft.com/crm/2011/02/Contracts">	Unpivot Only Selected Columns
18	United States	<IndividualSurvey xmlns="http://schemas.microsoft.com/crm/2011/02/Contracts">	Rename...
			Move
			Drill Down

Query Settings

PROPERTIES

Name

Customer

All Properties

APPLIED STEPS

Source

Navigation

Filtered Rows

Delimiter...

By Number of Characters...

By Positions...

By Lowercase to Uppercase

By Uppercase to Lowercase

By Digit to Non-Digit

By Non-Digit to Digit

Globomantics Customer Analysis - Power Query Editor

File Home Transform Add Column View Tools Help

New Recent Sources Enter Data

Close & Apply Close New Query

Queries [14]

- Helper Queries [3]
 - Sample File
 - Parameter1 (Sample File)
 - Transform File
- Transform Sample File
- Queries not in model [5]
 - CA Geo
 - OR Geo
 - WA Geo
 - State Surveys
 - Geography
- Other Queries [5]
 - Customer
 - Sales
 - Survey
 - Location
 - Median Groups

Properties Data Type: Text

Text Analytics Vision Azure Machine Learning AI Insights

Split Column by Delimiter

Specify the delimiter used to split the text column.

Select or enter delimiter

--Custom--

<

Split at

Left-most delimiter

Right-most delimiter

Each occurrence of the delimiter

Advanced options

Quote Character

"

Split using special characters

Insert special character

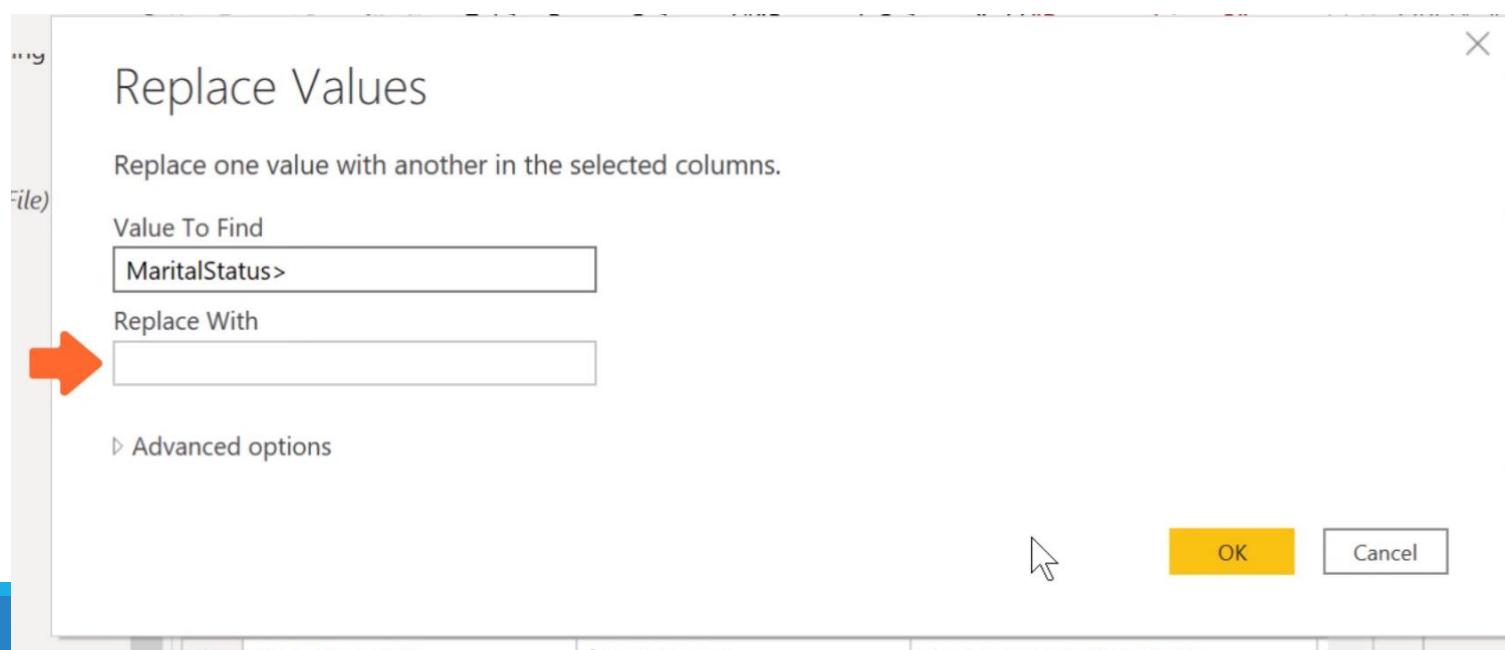
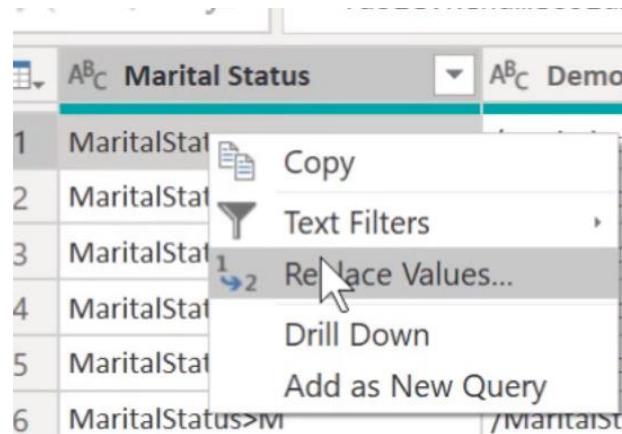
OK Cancel

	17	United States	<IndividualSurvey xmlns="http://schemas.microsoft.com/sqlserver/20...	
▼	18	United States	<IndividualSurvey xmlns="http://schemas.microsoft.com/sqlserver/20...	▼
	19	<		>

16 COLUMNS, 999+ ROWS Column profiling based on top 1000 rows

Demographic will split into multiple columns

We need to **remove or rename or replace few columns / values**





Replace Values

X

Replace one value with another in the selected columns.

Value To Find

Replace With

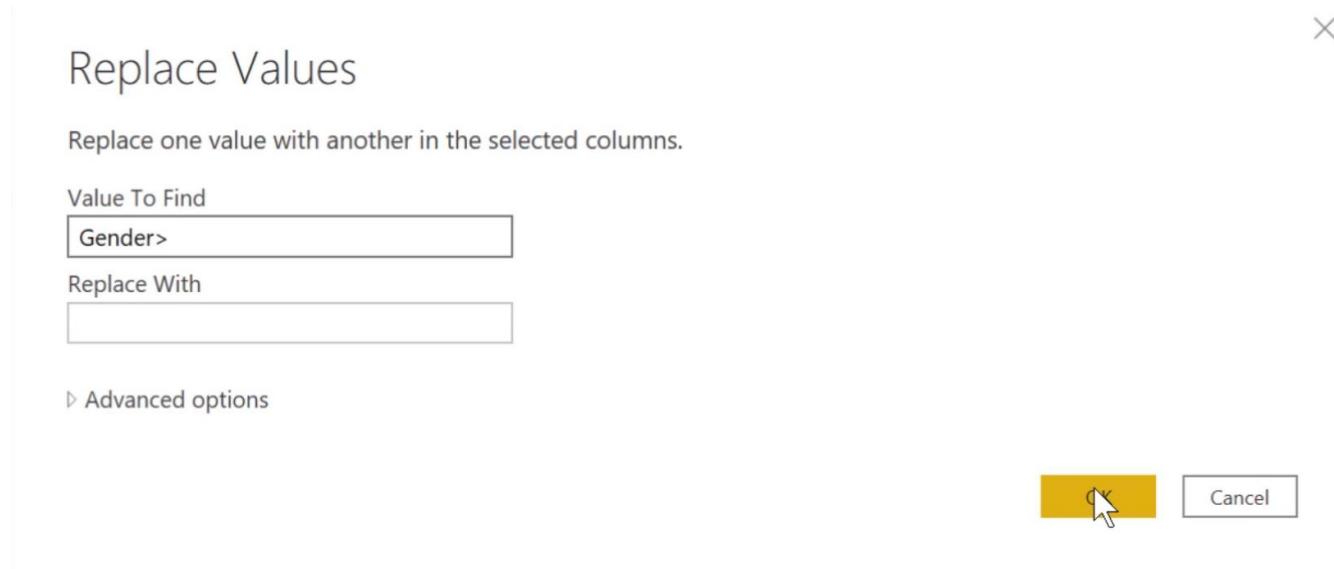
▷ Advanced options

OK

Cancel

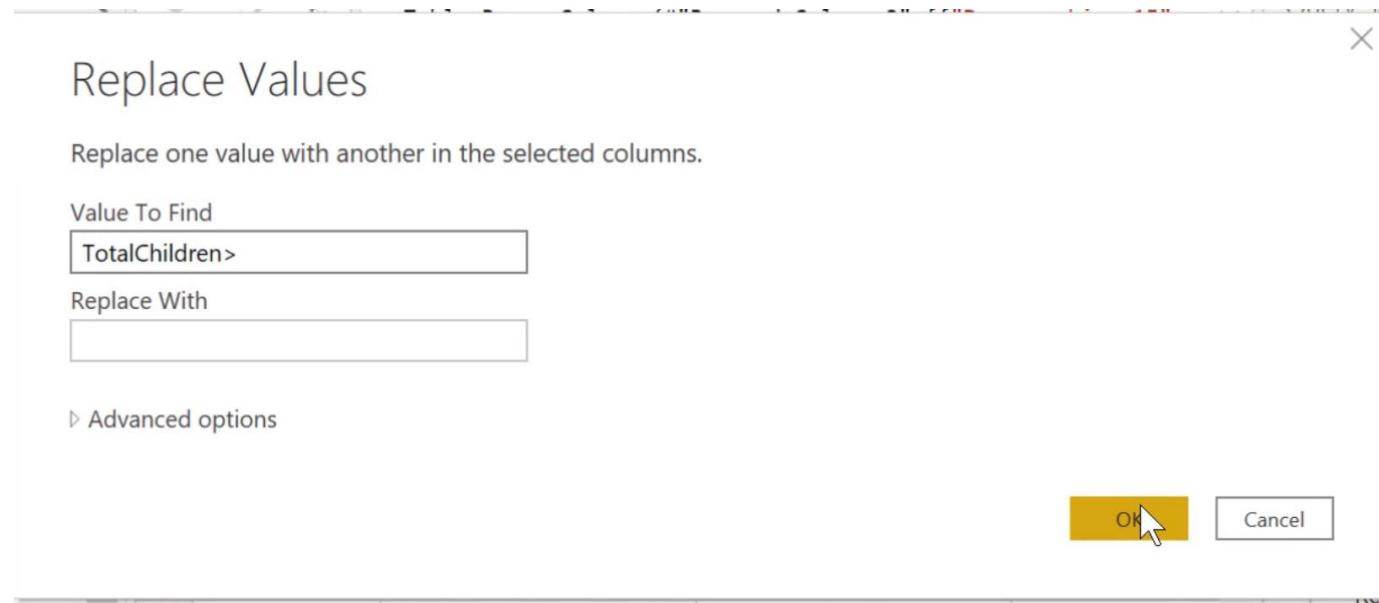
Demographic.13 -> Gender

Do the replace operation



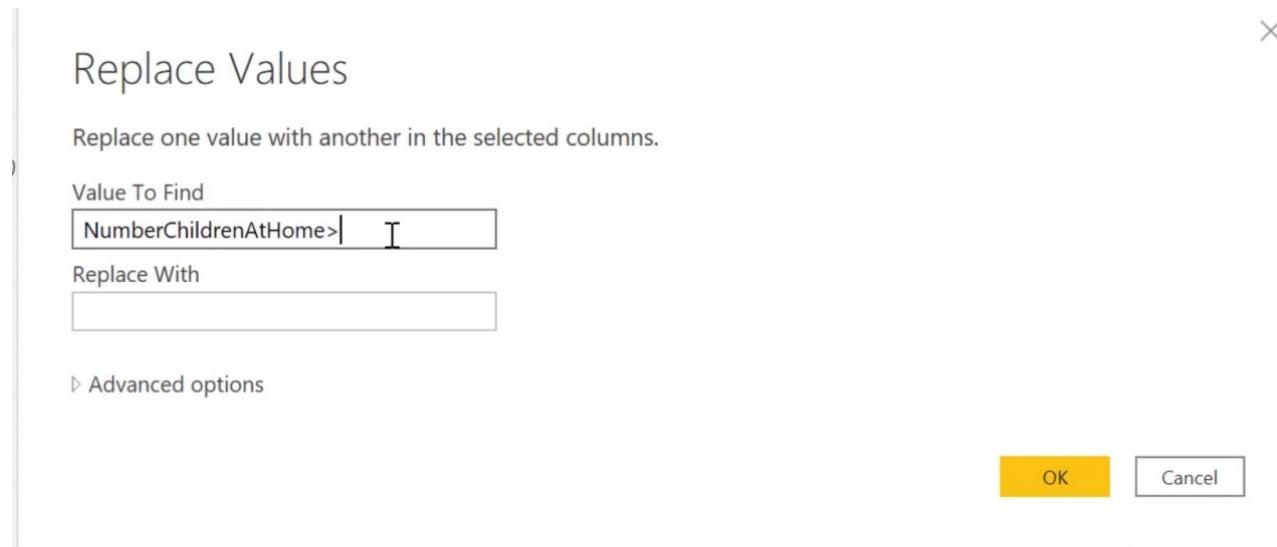
Demographic.15 -> Total Children

Do the replace operation



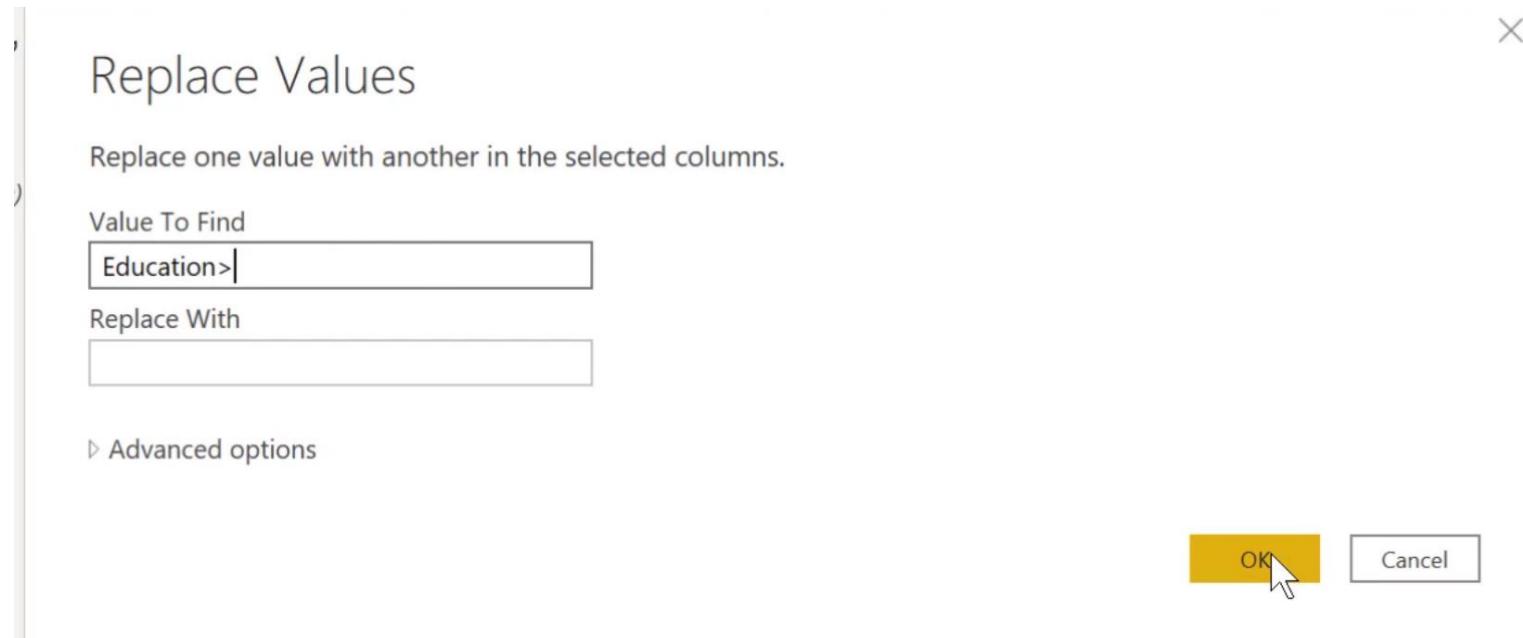
Demographic.17 -> NumberChildrenAtHome

Do the replace operation



Demographic.19 -> Education

Do the replace operation



Demographic.21 -> Occupation

Do the replace operation



Replace Values

Replace one value with another in the selected columns.

Value To Find

Replace With

A mouse cursor icon pointing towards the 'Replace With' input field.

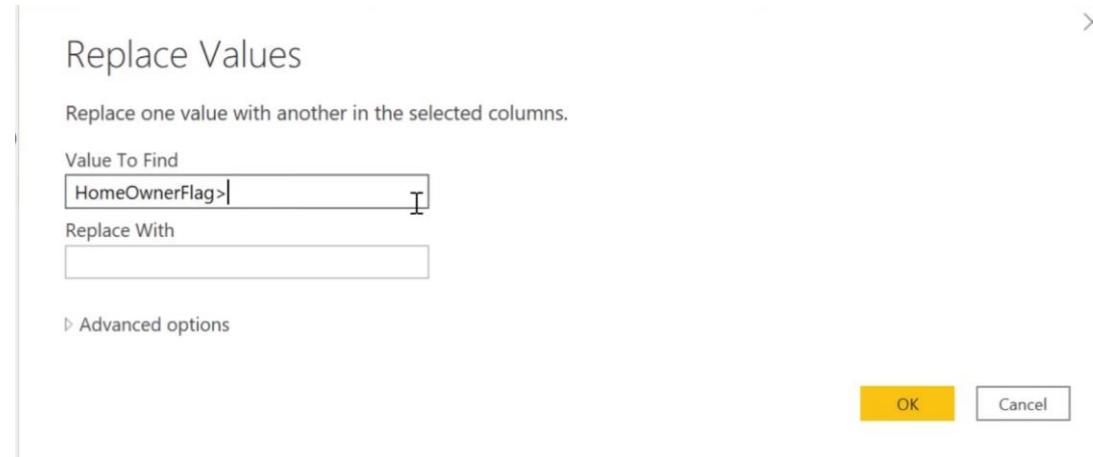
▷ Advanced options

OK

Cancel

Demographic.23 -> HomeOwnerFlag

Do the replace operation



Demographic.25 -> NumberCarsOwned

Do the replace operation

Replace Values



Replace one value with another in the selected columns.

Value To Find

Replace With

▷ Advanced options

OK

Cancel

Demographic.27 -> ComputeDistance

Do the replace operation

Queries [14]

◀ Helper Queries [3]

- Sample File
 - Parameter1 (Sample File)
 - Transform File
 - Transform Sample File

► Queries not in model [5]

-  CA Geo
 -  OR Geo
 -  WA Geo
 -  State Surveys
 -  Geography

◀ Other Queries [5]

-  Customer
 -  Sales
 -  Survey
 -  Location

= Table.RemoveColumns(#"Replaced Value9", {"Demographics.28",

	A ^B C YearlyIncome	A ^B C Gender	A ^B C TotalChildren
1	50001-75000	F	2
2	75001-100000	M	0
3	50001-75000	M	5
4	25001-50000	F	0
5	25001-50000	F	0
6	50001-75000	M	2
7	50001-75000	F	1
8	25001-50000	M	3
9	25001-50000	F	0
10	25001-50000	F	1
11	75001-100000	M	3
12	25001-50000	M	4
13	50001-75000	F	4
14	50001-75000	M	2
15	25001-50000	F	5
16	25001-50000	F	0
17	50001-75000	F	0

Queries [14]

◀ Helper Queries [3]

- Sample File*
 - Parameter1 (Sample File)*
 - Transform File*
 - Transform Sample File*
 - Queries not in model [5]*
 - CA Geo*
 - OR Geo*
 - WA Geo*
 - State Surveys*
 - Geography*
 - Other Queries [5]*
 - Customer*
 - Sales*
 - Survey*
 - Location*

▶ Queries not in model [5]

-  CA Geo
 -  OR Geo
 -  WA Geo
 -  State Surveys
 -  Geography

◀  Other Queries [5]

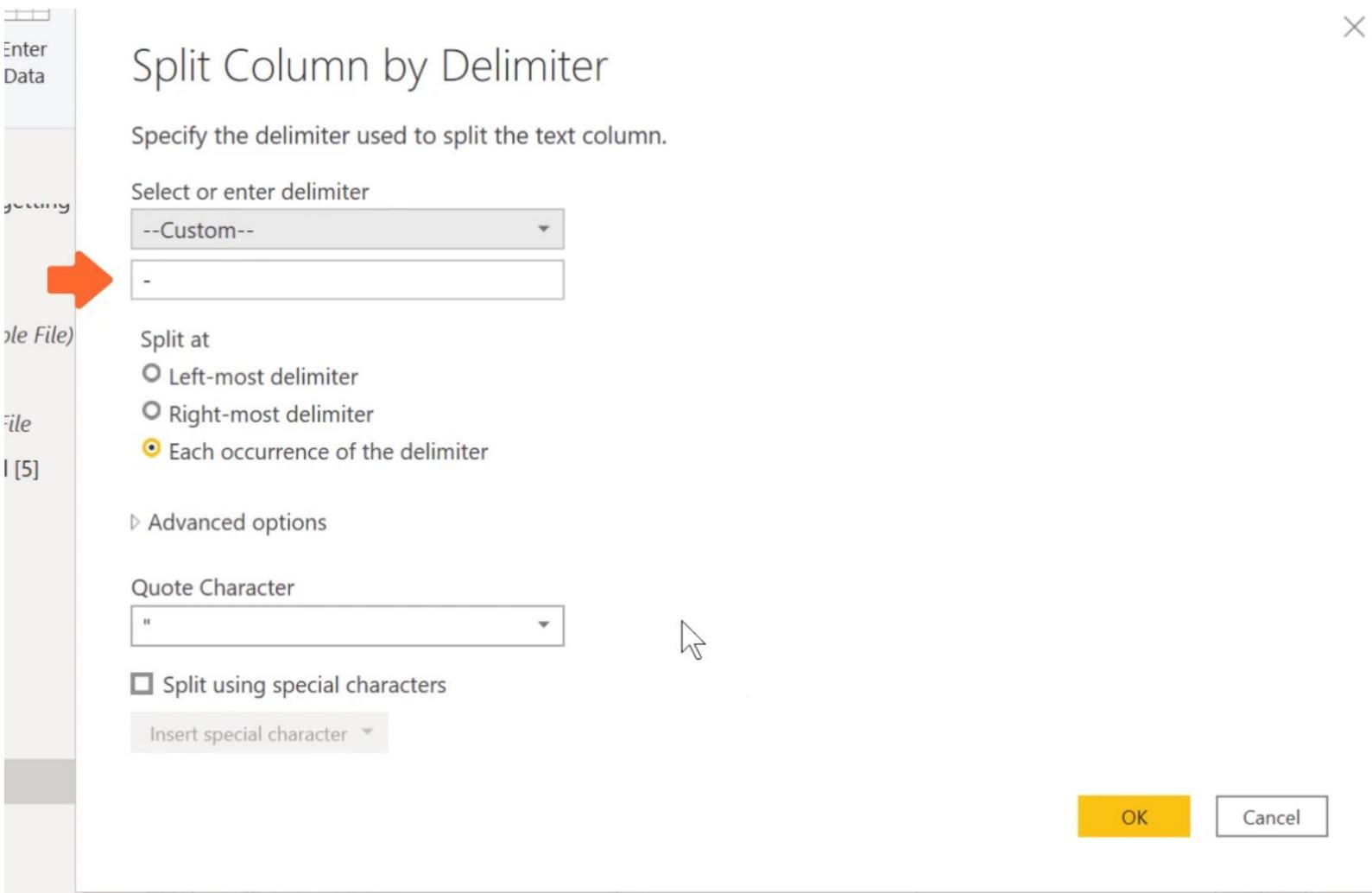
- Customer
 - Sales
 - Survey
 - Location

	A B C	YearlyIncome
1		50001-75000
2		75001-100000
3		50001-75000
4		25001-50000
5		25001-50000
6		50001-75000
7		50001-75000
8		25001-50000
9		25001-50000
10		25001-50000
11		75001-100000
12		25001-50000
13		50001-75000
14		50001-75000
15		25001-50000
16		25001-50000
17		50001-75000

```
= Table.RemoveColumns(#"Replaced Value9", {"Demographics.28",
```

-  Copy
-  Remove
- Remove Other Columns
- Duplicate Column
-  Add Column From Examples...
- Remove Duplicates
- Remove Errors
- Change Type
- Transform
-  Replace Values...
- Replace Errors...
-  Split Column
-  Group By...
- Fill
-  Unpivot Columns
- Unpivot Other Columns
- Unpivot Only Selected Columns
-  Rename...

	TotalChildren
	2
	0
	5
	0
	0
	2
	1
	3
	0
	1



Remove YearlyIncome.2 column

And modify YearlyIncome.1 column

The screenshot shows the Power BI Data Editor interface. On the left, the 'Queries [14]' pane is open, displaying a list of queries including 'Helper Queries', 'Queries not in model', and 'Other Queries'. The 'Customer' query is currently selected, highlighted with a yellow bar at the top of the list.

In the main area, a table is displayed with columns: 'YearlyIncome.1', 'Gender', 'TotalChildren', and 'Numb'. The 'YearlyIncome.1' column contains numerical values and one text value 'greater than 100000' at row 19. A blue arrow points from the text 'Rename to' in the 'Replace Values' dialog to the 'YearlyIncome.1' column header.

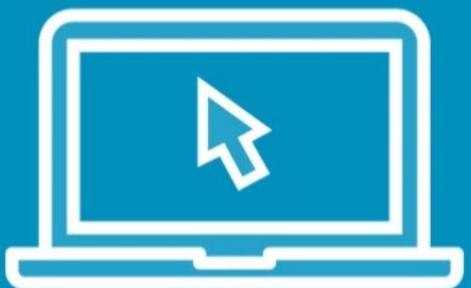
A 'Replace Values' dialog is open over the table. It has the following fields:

- Value To Find: greater than 100000
- Replace With: 100001
- Advanced options (button)
- OK button
- Cancel button

The table data starts from row 17:

	YearlyIncome.1	Gender	TotalChildren	Numb
17	50001			
18	50001			
19	greater than 100000			
20	25001			
21	50001			
22	50001			
23	25001			
24	50001			
25	50001			
26	50001			
27	25001			
28	50001			
29	25001	F	1	4
30	50001	F	5	0
31	50001	F	5	0
32	50001	F	5	0
33	75001	F	3	0
34				

Demo



Add columns for sorting

Fix column data types

Globomantics Data Assessment

Customer

...	Education	...	CommuteDistance	...
...	Bachelors	...	0-1 Miles	...
...	Partial College	...	5-10 Miles	...
...	High School	...	10+ Miles	...
...	Graduate Degree	...	1-2 Miles	...
...	Partial High School	...	2-5 Miles	...

Globomantics Data Assessment

Duplicate columns and replace text values with numeric values

Customer

...	Education	...	CommuteDistance	...	EducationSort	CommuteDistanceSort
...	Bachelors	...	0-1 Miles	...	4	0
...	Partial College	...	5-10 Miles	...	3	5
...	High School	...	10+ Miles	...	2	10
...	Graduate Degree	...	1-2 Miles	...	5	1
...	Partial High School	...	2-5 Miles	...	1	2

Globomantics Customer Analysis - Power Query Editor

File Home Transform Add Column View Tools Help

Close & Apply New Recent Enter Data Data source settings Manage Parameters Refresh Preview Manage

Manage Columns Reduce Rows Sort Split Column Group By Data Type: Text Use First Row as Header Replace Values

Close New Query Data Sources Parameters Query Transform

Queries [14]

- Transform File (Getting Started)
- Helper Queries [3]
 - Sample File
 - Parameter1 (Sample File)
 - Transform File
- Queries not in model [5]
 - CA Geo
 - OR Geo
 - WA Geo
 - State Surveys
 - Geography
- Other Queries [5]
 - Customer
 - Sales
 - Survey
 - Location
 - Median Groups

= Table.RenameColumns(#"Replaced Value10",{{"YearlyIncome.1",

Column Context Menu (Education column):

- Copy
- Remove
- Remove Other Columns
- Duplicate Column** (highlighted with red arrow)
- Add Column From Examples...
- Remove Duplicates
- Remove Errors
- Change Type
- Transform
- Replace Values...
- Replace Errors...
- Split Column
- Group By...
- Fill
- Unpivot Columns
- Unpivot Other Columns
- Unpivot Only Selected Columns
- Rename...
- Move
- Drill Down

	OnAtHome	Education	HomeOwnerFlag
1		Bachelors	0
2		Partial College	1
3		Bachelors	1
4		Bachelors	0
5		High School	1
6		High School	1
7		Graduate Degree	1
8		Partial College	1
9		High School	1
10		High School	1
11		Bachelors	0
12		High School	0
13		Bachelors	1
14		Partial College	1
15		High School	1
16		Partial High School	1
17		Partial College	1
18		Partial College	1

Skip to main content

Advanced Editor

Close & Apply ▾ New Source ▾ Recent Sources Enter Data Data source settings Manage Parameters Refresh Preview ▾ Manage ▾ Manage Columns ▾ Reduce Rows ▾ A Sort Split Column ▾ Group By 1 2 Replace Values Close New Query Data Sources Parameters Query Advanced Editor Transform

Queries [14]

Helper Queries [3]

- Sample File
- Parameter1 (Sample File)
- Transform File

Transform Sample File

Queries not in model [5]

- CA Geo
- OR Geo
- WA Geo
- State Surveys
- Geography

Other Queries [5]

- Customer
- Sales
- Survey
- Location

= Table.DuplicateColumn(#"Renamed Columns10", "Education",

	A	B	C
1	1	NumberCarsOwned	CommuteDistance
2	2		0-1 Miles
3	3		5-10 Miles
4	1		10+ Miles
5	2		2-5 Miles
6	2		5-10 Miles
7	0		2-5 Miles
8	2		0-1 Miles
9	2		5-10 Miles
10	1		2-5 Miles
11	1		0-1 Miles
12	2		1-2 Miles
13	3		10+ Miles
14	2		10+ Miles
15	3		10+ Miles
16	2		5-10 Miles
17	2		5-10 Miles

Copy Remove Remove Other Columns Duplicate Column Add Column From Examples... Remove Duplicates Remove Errors Change Type Transform Replace Values... Replace Errors... Split Column Group By... Fill Unpivot Columns Unpivot Other Columns Unpivot Only Selected Columns Rename...

Globomantics Customer Analysis - Power Query Editor

File Home Transform Add Column View Tools Help

Close & Apply New Recent Enter Data Data source settings Manage Parameters Refresh Preview Manage Properties Advanced Editor Manage Columns Reduce Rows Sort Split Column Group By Data Type: Text Use First Row as Headers Replace Values Transform Close New Query Data Sources Parameters Query

Text Analytics Vision Azure Machine Learning AI Insights

Queries [14]

Helper Queries [3]

- Sample File
- Parameter1 (Sample File)
- Transform File
- Transform Sample File

Queries not in model [5]

- CA Geo
- OR Geo
- WA Geo
- State Surveys
- Geography

Other Queries [5]

- Customer
- Sales
- Survey

= Table.DuplicateColumn(#"Duplicated Column",

	A ^B C CommuteDistance	A ^B C Education - Copy	A ^B C Com
1	0-1 Miles	Bachelors	0-1 Miles
2	5-10 Miles	Partial College	5-10 Miles
3	10+ Miles	Bachelors	10+ Miles
4	2-5 Miles	Bachelors	2-5 Miles
5	5-10 Miles	High School	5-10 Miles
6	2-5 Miles	High School	2-5 Miles
7	0-1 Miles	Graduate Degree	0-1 Miles
8	5-10 Miles	Partial College	5-10 Miles
9	5-10 Miles	High School	5-10 Miles
10	2-5 Miles	High School	2-5 Miles
11	0-1 Miles	Bachelors	0-1 Miles
12	1-2 Miles	High School	1-2 Miles
13	10+ Miles	Bachelors	10+ Miles
14	10+ Miles	Partial College	10+ Miles
15	10+ Miles	High School	10+ Miles
16	5-10 Miles	Partial High School	5-10 Miles
17	5-10 Miles	Partial College	5-10 Miles

Properties

Query Settings

Copy Remove Remove Other Columns Duplicate Column Add Column From Examples... Remove Duplicates Remove Errors Change Type Transform Replace Values... Replace Errors... Split Column By Delimiter... By Number of Characters... By Positions... By Lowercase to Uppercase By Uppercase to Lowercase By Digit to Non-Digit By Non-Digit to Digit



Split Column by Delimiter

Specify the delimiter used to split the text column.

Select or enter delimiter

--Custom--

| I

Split at

- Left-most delimiter
- Right-most delimiter
- Each occurrence of the delimiter

After splitting eliminate the second column

► Advanced options

Quote Character

"

Split using special characters

Insert special character ▾

OK

Cancel

Queries [14]

— Transform File from getting started

Helper Queries [3]

Sample File

Parameter1 (Sample File)

Transform File

Transform Sample File

Queries not in model [5]

CA Geo

OR Geo

WA Geo

State Surveys

Geography

Other Queries [5]

Customer

= Table.RemoveColumns(#"Changed Type2", {"CommuteDistance - Copy.1", "Education - Copy.1"})

	CommuteDistance	Education	CommuteDistance - Copy.1
1	0-1 Miles	Bachelors	0
2	5-10 Miles	Partial College	5
3	10+ Miles	Bachelors	10+ Miles
4	2-5 Miles	Bachelors	2
5	5-10 Miles	High School	5

Replace Values

Replace one value with another in the selected columns.

Value To Find

+ Miles

Replace With

[]

Advanced options

OK

Cancel

- Copy
- Text Filters
- Replace Values... 
- Drill Down
- Add as New Query



1 ² 3 CommuteDistance - Copy.1
0

1 ² 3 CommuteDistance
0

X ✓ fx = Table.ReplaceValue(#"Removed Columns12", "+ Miles", "",

A ^B C CommuteDistance	A ^B C Education - Copy	A ^B C CommuteDistance - Copy.1
1 0-1 Miles	Bachelors	1.2 Decimal Number
2 5-10 Miles	Partial College	\$ Fixed decimal number
3 10+ Miles	Bachelors	1 ² 3 Whole Number
4 2-5 Miles	Bachelors	% Percentage

Globomantics Customer Analysis - Power Query Editor

File Home Transform Add Column View Tools Help

Close & Apply New Recent Enter Data source settings Manage Parameters Refresh Preview Advanced Editor Manage Data Type: Text Use First Row as Headers

Close New Query Data Sources Parameters Query Sort Split Column Group By Replace Values Transform

Queries [14]

- Transform File (empty)
- Helper Queries [3]
 - Sample File
 - Parameter1 (Sample File)
 - Transform File
 - Transform Sample File
- Queries not in model [5]
 - CA Geo
 - OR Geo
 - WA Geo
 - State Surveys
 - Geography
- Other Queries [5]
 - Customer
 - Sales
 - Survey
 - Location
 - Median Groups

= Table.RenameColumns(#"Changed Type3",{{"CommuteDistance", "Education - Copy"}, {"CommuteDistanceSort", "EducationSort"}})

	CommuteDistance	Education - Copy	CommuteDistanceSort
1	0-1 Miles	Bachelors	0
2	5-10 Miles	Partial College	5
3	10+ Miles	Bachelors	10
4	2-5 Miles	Bachelors	2
5	5-10 Miles	High School	5
6	2-5 Miles	High School	2
7	0-1 Miles	Graduate Degree	0
8	5-10 Miles	Partial College	5
9	5-10 Miles	High School	5
10	2-5 Miles	High School	2
11	0-1 Miles	Bachelors	0
12	1-2 Miles	High School	1
13	10+ Miles	Bachelors	10
14	10+ Miles	Partial College	10
15	10+ Miles	High School	10
16	5-10 Miles	Partial High	5
17	5-10 Miles	Partial Coll	5
18	10+ Miles	Partial Coll	10

Copy Text Filters Place Values... Drill Down Add as New Query

27 COLUMNS, 999+ ROWS Column profiling based on top 1000 rows

Rename the column to EducationSort

And

Change the data type to Whole number

X

Replace Values

Replace one value with another in the selected columns.

Value To Find

Replace With

► Advanced options

Replace Values

Replace one value with another in the selected columns.

Value To Find

Replace With

► Advanced options

Replace Values

Replace one value with another in the selected columns.

Value To Find

Replace With

► Advanced options

Replace Values

Replace one value with another in the selected columns.

Value To Find

Replace With

► Advanced options

OK

Cancel

Replace Values

Replace one value with another in the selected columns.

Value To Find

Replace With

► Advanced options

- **Numbercarsowned** column data type change to whole number
- **HomeOwnerFlag** column data type change to whole number
- **NumberChildrnAtHome** column data type change to whole number
- **TotalChildren** column data type change to whole number

Demo



Disable data loads for selected queries

Globomantics Data Assessment

Disable data loads for unused queries

Customer

Location

Median
Groups

Sales

Survey

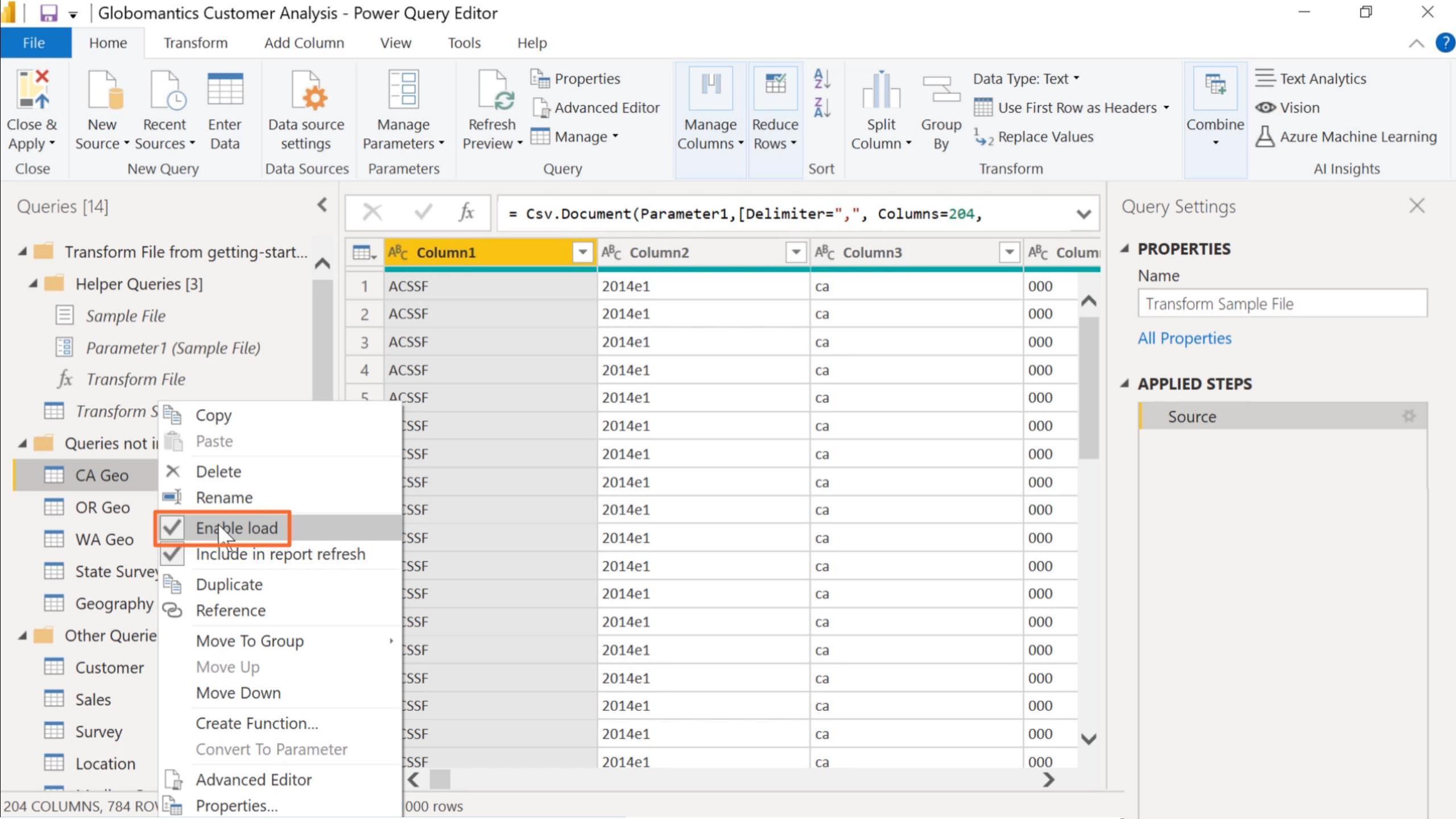
CA Geo

OR Geo

WA Geo

State Surveys

Geography



Globomantics Customer Analysis - Power Query Editor

File Home Transform Add Column View Tools Help

Close & Apply New Recent Enter Data Data source settings Manage Parameters Refresh Preview Advanced Editor Manage Columns Reduce Rows Sort Split Column Group By Data Type: Text Use First Row as Headers Replace Values Close New Query Data Sources Parameters Query Transform Combine Text Analytics Vision Azure Machine Learning AI Insights

Queries [14]

- Transform File from getting-start...
- Helper Queries [3]
 - Sample File
 - Parameter1 (Sample File)
 - Transform File
- Transform Sample File
- Queries not in model [5]
 - CA Geo
 - OR Geo
 - WA Geo
 - State Surveys
 - Geography
- Other Queries [5]
 - Customer
 - Sales
 - Survey
 - Location

= Csv.Document(Parameter1,[Delimiter=",", Columns=204,

	Column1	Column2	Column3	Column4
1	ACSSF	2014e1	ca	000
2	ACSS			000
3	ACSS			000
4	ACSS			000
5	ACSS			000
6	ACSS			000
7	ACSS			000
8	ACSS			000
9	ACSS			000
10	ACSSF	2014e1	ca	000
11	ACSSF	2014e1	ca	000
12	ACSSF	2014e1	ca	000
13	ACSSF	2014e1	ca	000
14	ACSSF	2014e1	ca	000
15	ACSSF	2014e1	ca	000
16	ACSSF	2014e1	ca	000
17	ACSSF	2014e1	ca	000
18	ACSSF	2014e1	ca	000
19				

Possible Data Loss Warning

Disabling load will remove the table from the report, and any visuals that use its columns will be broken.

Continue Cancel

Query Settings

PROPERTIES

Name: Transform Sample File

All Properties

APPLIED STEPS

Source

204 COLUMNS, 784 ROWS Column profiling based on top 1000 rows

Repeat the steps for
All other queries under **Queries not in model group**

Close and apply form power query editor





