

# VIEWING YOUR QUERY DETAILS

## VLO offers 3 Options

### Breakout - Pivot Table - Analysis Report

# PIVOT TABLE

## PIVOT – Single Tier

- The Pivot option is found in the top menu row (circled in red below)

The screenshot shows the VLO Query Builder interface. At the top, there is a teal header with "Query Builder" and "Voters". Below the header, there is a navigation bar with "State: North Carolina", "State Summary | 7,653,946 Voters", "Run Count", "Clear Query", "Auto Count OFF", "Clear Query on Switch YES", "Include Movers NO", and "Analysis Report".

Below the navigation bar, there are several checkboxes for data points:

- Unique Individuals: 0
- Unique Landline #: 0
- Unique Email: 0
- Run On Both Voters & Consumers (must not include Vote History)
- Unique Households: 0
- Unique Mobile #: 0
- Unique Household Email: 0
- Unique Addresses: 0
- Unique Household Landline #: 0
- Unique Address Landline #: 0
- Unique All Phone #: 0
- Unique Household Mobile #: 0
- Unique Address Mobile #: 0

Below the checkboxes, there is a "Select Data-point" sidebar with a list of categories: Jurisdiction/Geography (1), Demographics (2), Party, Vote History (1), Mail/Email, Phone, Models, Movers, Micro-Targeting, and Automobile Data.

The main content area shows a "Query" tab selected, with "Mapping", "Pivot" (circled in red), and "Checkout" tabs. Below the tabs, there is a "Current Query" section with a "Toggle Query" button and a query description: "(County is (Polk)) and (Exclude Deceased AND Exclude Movers) and (Voted - Any Party/Method in PPP24)".

Below the query description, there is a "Save Current Query As" section with an "Enter Query Name" field, a "Save" button, a "+ Strip It" button, and an "Open Snippets" button.

Below the save section, there is a table with the following columns: Actions, Data type, Data-point, Operator, and Selection.

Actions	Data type	Data-point	Operator	Selection
	Jurisdiction/Geography	County	Equals	Polk
	Demographics	Deceased	Equals	Exclude Deceased
	Demographics	Change of Address Flag	Equals	Exclude Movers
	Vote History	Vote History	is	Voted - Any Party/Method in PPP24

- Once clicked the Pivot screen displays – the left side menu displays a list of available fields as well as the option also found under BREAKOUT to select counts by Individual, Phone, Households, etc (circled in red on the image on the next page)

### Menu icons

- Execute Click to Execute (Run) the Pivot,
- Refresh the Pivot
- Clear Pivot fields and Results
- Show the Query being used for Pivot
- Toggle to Full Screen

Query Mapping Pivot Checkout

Select the fields you wish to analyze into columns & rows and click Execute button.

Individual

Execute

Find a field

Description	Name
2020 - General Election Absentee Ballot Issued	GEN20_ABISSUED
2020 - General Election Absentee Ballot Requested	GEN20_ABREQUESTED
2020 - General Election Absentee Ballot Returned	GEN20_ABRETURNED
2022 - General Election - Absentee Ballot Requested	GEN22_ABREQUESTED
2022 - General Election - Absentee Ballot Returned	GEN22_ABRETURNED
2022 - General Election Absentee Issued	GEN22_ABISSUED
2nd Most Recent Lender Code	LND_2NDCOD
2nd Most Recent Lender Name	LND_2NDNAM
2nd Most Recent Mortgage Amount	MRG_2NDAMT
2nd Most Recent Mortgage Date	MRG_2NDDAT
2nd Most Recent Mortgage Interest Rate	MRG_2NDRAT

Columns: →

Rows: ↓

Description Name

Description Name

- **To Create your Pivot Table**

- Search using the Text Search box (circled in red below)
- Once your desired field is displayed, highlight it with your cursor.
- Then either Drag/Drop the desired fields into the Columns and Rows Areas or use the + icon to add the field to your desired location.
- In the example below the Pivot Table is set to generate and display counts of Gender by Precinct

Query Mapping Pivot Checkout

Select the fields you wish to analyze into columns & rows and click Execute button.

Individual

Execute

Gender

Description	Name
Age 00-02 Unknown Gender Child	CH_0002UNK
Age 03-05 Unknown Gender Child	CH_0305UNK
Age 06-10 Unknown Gender Child	CH_0610UNK
Age 11-15 Unknown Gender Child	CH_1115UNK
Age 16-17 Unknown Gender Child	CH_1617UNK
Gender	SEX
Gender Household Mix	GENDER_MIX

Columns: →

Rows: ↓

Description Name

Description Name

Select the fields you wish to analyze into columns & rows and click Execute button.

Individual

Execute

Prec

Description	Name
Precinct	PREC_NO1
Precinct Name	PREC_NAME
Precinct(Old)	PREC_NO1_OLD
Turn Out By Precinct 2016 Presidential Gener: TOD_PRES_DIFF_2016_PRE	
Turn Out By Precinct 2020 Presidential Gener: TOD_PRES_DIFF_2020_PRE	
Turn Out Democrat by Precinct - 2016 Preside: TOD_PRES_D_2016_PREC	
Turn Out Other by Precinct - 2016 Presidential: TOD_PRES_O_2016_PREC	
Turn Out Republican by Precinct - 2016 Presid: TOD_PRES_R_2016_PREC	

Columns: →		Rows: ↓	
Description	Name	Description	Name
Gender	SEX	Precinct	PREC_NO1

- Once the fields are selected for Rows and Columns click the EXECUTE button to generate a Pivot Table

Select the fields you wish to analyze into columns & rows and click Execute button.

Individual

Execute

Prec

Description	Name
Precinct	PREC_NO1
Precinct Name	PREC_NAME
Precinct(Old)	PREC_NO1_OLD
Turn Out By Precinct 2016 Presidential Gener: TOD_PRES_DIFF_2016_PRE	
Turn Out By Precinct 2020 Presidential Gener: TOD_PRES_DIFF_2020_PRE	
Turn Out Democrat by Precinct - 2016 Preside: TOD_PRES_D_2016_PREC	
Turn Out Other by Precinct - 2016 Presidential: TOD_PRES_O_2016_PREC	
Turn Out Republican by Precinct - 2016 Presid: TOD_PRES_R_2016_PREC	

Columns: →		Rows: ↓	
Description	Name	Description	Name
Gender	SEX	Precinct	PREC_NO1

Expand All Collapse All PDF Excel Formatted HTML Plain HTML

	Female	Male
	COUNT	COUNT
CG05	265	271
CL07	362	288
CL08	555	442
GC09	424	364
SA04	264	235
TR123	513	418
WO06	246	215

- Once your results are displayed (the larger the number of records in your query the longer it will take for the pivot table to display) there are several options for output: PDF, Excel, Formatted HTML or Plain HTML

## PIVOT – Multiple Tiers /Complex

- The Pivot table can be used to pivot multiple datapoints. The output is then tiered.
- In the example below the datapoint AGE has been added to the single level pivot shown in the previous example.

Query
Mapping
Pivot
Checkout

Select the fields you wish to analyze into columns & rows and click **Execute** button.

Individual

Execute ⌵ ⌵ ⌵ ⌵

Age

Description	Name
2nd Most Recent Mortgage Amount	MRG_2NDAMT
2nd Most Recent Mortgage Date	MRG_2NDDAT
2nd Most Recent Mortgage Interest Rate	MRG_2NDRAT
2nd Most Recent Mortgage Interest Rate Type	MRG_2NDTYP
2nd Most Recent Mortgage Load Type Code	MRG_2NDCOD
Age	AGE
Age 00-02 Female Child	CH_0002FEM
Age 00-02 Male Child	CH_0002MAL
Age 00-02 Unknown Gender Child	CH_0002UNK
Age 03-05 Female Child	CH_0305FEM
Age 03-05 Male Child	CH_0305MAL

Columns: →

Description	Name
Gender	SEX

Rows: ↓

Description	Name
Age	AGE
Precinct	PREC_NO1

Expand All
Collapse All
PDF
Excel
Formatted HTML
Plain HTML

	Female	Male
	COUNT	COUNT
CG05	265	271
CL07	362	288
CL08	555	442
GC09	424	364
SA04	264	235
TR123	513	418
WO06	246	215

- Below is output to screen displaying AGE as the top tier, then precinct underneath it with counts for Male and Female for each Age/Precinct combination.

Query
Mapping
Pivot
Checkout

Select the fields you wish to analyze into columns & rows and click **Execute** button.

Individual

Execute ⌵ ⌵ ⌵ ⌵

Age

Description	Name
2nd Most Recent Mortgage Amount	MRG_2NDAMT
2nd Most Recent Mortgage Date	MRG_2NDDAT
2nd Most Recent Mortgage Interest Rate	MRG_2NDRAT
2nd Most Recent Mortgage Interest Rate Type	MRG_2NDTYP
2nd Most Recent Mortgage Load Type Code	MRG_2NDCOD
Age	AGE
Age 00-02 Female Child	CH_0002FEM
Age 00-02 Male Child	CH_0002MAL
Age 00-02 Unknown Gender Child	CH_0002UNK
Age 03-05 Female Child	CH_0305FEM
Age 03-05 Male Child	CH_0305MAL

Columns: →

Description	Name
Gender	SEX

Rows: ↓

Description	Name
Age	AGE
Precinct	PREC_NO1

Expand All
Collapse All
PDF
Excel
Formatted HTML
Plain HTML

	Male	Female
	COUNT	COUNT
101	1	0
CL08	1	0
102	1	0
TR123	1	0
018	6	4
CG05	2	0
CL07	0	1
CL08	1	2
GC09	1	0

- Another way of looking at the same fields is shown below.
- Moving AGE from the ROW to the COLUMN - the Pivot table then displays each Age at the top with a breakout by Male/Female in the next row with Precinct numbers displayed to the left.

Select the fields you wish to analyze into columns & rows and click Execute button.

Individual

Execute

Age

Description	Name
2nd Most Recent Mortgage Amount	MRG_2NDAMT
2nd Most Recent Mortgage Date	MRG_2NDDAT
2nd Most Recent Mortgage Interest Rate	MRG_2NDRAT
2nd Most Recent Mortgage Interest Rate Type	MRG_2NDTYP
2nd Most Recent Mortgage Load Type Code	MRG_2NDCOD
Age	AGE
Age 00-02 Female Child	CH_0002FEM
Age 00-02 Male Child	CH_0002MAL
Age 00-02 Unknown Gender Child	CH_0002UNK
Age 03-05 Female Child	CH_0305FEM
Age 03-05 Male Child	CH_0305MAL

Columns:		Rows:	
Description	Name	Description	Name
Age	AGE	Precinct	PREC_NO1
Gender	SEX		

Expand All Collapse All PDF Excel Formatted HTML Plain HTML

	101		102		018		019		020		021		
	Male	Female	Female										
	COUNT	COUNT	COUNT										
CG05	0	0	2	0	1	1	5	1	1	1			
CL07	0	0	0	1	3	3	2	1	2	0			
CL08	1	0	1	2	4	0	0	2	0	2			
GC09	0	0	1	0	2	1	4	2	1	0			
SA04	0	0	0	1	0	0	0	2	0	2			
TR123	0	1	1	0	1	1	2	0	0	0			
WO06	0	0	1	0	2	1	1	2	3	1			

- Multiple fields can be used in both COLUMNS and ROWS and displayed in two views.
- In the example below, Residence Zip code has been added to ROWS and now the counts are broken out by AGE and GENDER in the COLUMNS and by Zip and Precinct in the ROWS. There are two display options - EXPAND ALL – Top image; COLLAPSE ALL – Bottom image.

Select the fields you wish to analyze into columns & rows and click Execute button.

Individual

Execute

Zip

Description	Name
Mail Address Zip code	MZIP
Mail Address Zipcode Type	MZIPTYPE
New Mover - Zip + 4	NEWMOVER_ZIP4
New Mover - Zipcode	NEWMOVER_ZIP
Residence Address Zip Code Type	ZIPTYPE
Residence Zip + 4	ZIP4
Residence Zipcode	ZIP

Columns:		Rows:	
Description	Name	Description	Name
Age	AGE	Residence Zipcode	ZIP
Gender	SEX	Precinct	PREC_NO1

Expand All Collapse All PDF Excel Formatted HTML Plain HTML

	101		102		018		019		020		021		
	Male	Female	Female										
	COUNT	COUNT	COUNT										
28139	0	0	1	0	2	0	0	0	1	0	0	0	
GC09	0	0	1	0	1	0	0	1	0	0			
WO06	0	0	0	0	1	0	0	0	0	0			
CG05	0	0	0	0	0	0	0	0	0	0			
28722	1	0	0	3	6	4	5	4	1	1			
CL07	0	0	0	1	2	3	1	1	0	0			
CL08	1	0	0	2	3	0	0	2	0	1			
GC09	0	0	0	0	1	1	4	1	1	0			
TR123	0	0	0	0	0	0	0	0	0	0			
WO06													

- The Collapsed view collapses all precinct rows and displays only the Zip Code rows

Select the fields you wish to analyze into columns & rows and click Execute button.

Individual

Execute

Zip

Description	Name
Mail Address Zip code	MZIP
Mail Address Zipcode Type	MZIPTYPE
New Mover - Zip + 4	NEWMOVER_ZIP4
New Mover - Zipcode	NEWMOVER_ZIP
Residence Address Zip Code Type	ZIPTYPE
Residence Zip + 4	ZIP4
Residence Zipcode	ZIP

Columns:		Rows:	
Description	Name	Description	Name
Age	AGE	Residence Zipcode	ZIP
Gender	SEX	Precinct	PREC_NO1

Expand All Collapse All PDF Excel Formatted HTML Plain HTML

	101		102		018		019		020		021		
	Male	Female	Female										
	COUNT	COUNT	COUNT										
28139	0	0	1	0	2	0	0	0	1	0	0	0	
28722	1	0	0	3	6	4	5	4	1	1			
28731	0	0	0	0	0	0	0	1	0	0			
28750	0	0	0	0	0	0	0	0	0	0			
28756	0	0	3	0	2	2	6	3	4	2			
28773	0	0	0	1	0	0	0	1	0	2			
28782	0	1	2	0	3	1	3	0	2	1			
28792	0	0	0	0	0	0	0	0	0	0			

- Output options are the same as with a simple pivot.

### HTML example

	101		102		018		019		020		021		022		023	
	Male	Female														
	COUNT	COUNT														
28139	0	0	1	0	2	0	0	0	1	0	0	0	0	0	0	0
GC09	0	0	1	0	1	0	0	0	1	0	0	0	0	0	0	0
WO06	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
CG05	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28722	1	0	0	3	6	4	5	4	1	1	2	0	3	4		
CL07	0	0	0	1	2	3	1	1	0	0	1	0	2	1		
CL08	1	0	0	2	3	0	0	2	0	0	1	0	0	0	1	
GC09	0	0	0	0	1	1	4	1	1	1	0	1	0	1	2	
TR123	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
WO06	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
28731	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	
SA04	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	
28750	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
TR123	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
28756	0	0	3	0	2	2	6	3	4	2	2	1	1	1	1	
CG05	0	0	2	0	1	1	5	1	1	1	2	1	2	1	1	
WO06	0	0	1	0	1	1	1	2	3	1	0	0	0	0	1	
CL07	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
GC09	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
28773	0	0	0	1	0	0	0	1	0	2	0	0	0	1	3	
SA04	0	0	0	1	0	0	0	1	0	2	0	0	0	1	3	
WO06	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
28782	0	1	2	0	3	1	3	0	2	1	0	1	1	1	3	
CL08	0	0	1	0	1	0	0	0	0	1	0	0	0	0	0	
TR123	0	1	1	0	1	1	2	0	0	0	0	0	1	0	0	
CL07	0	0	0	0	1	0	1	0	2	0	0	0	0	1	1	
GC09	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	
WO06	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

### Excel example

ZIP	PREC_NO	101		102		18		19		20		21		22		23		24		25		26		27		28		29		
		Male	Female																											
28139		0	0	1	0	2	0	0	1	0	0	0	0	0	0	2	1	0	0	1	0	0	0	0	0	0	0	1	0	
GC09		0	0	1	0	1	0	0	1	0	0	0	0	0	0	2	1	0	0	1	0	0	0	0	0	0	0	1	0	
WO06		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
CG05		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
28722		1	0	0	3	6	4	5	4	1	1	2	0	3	4	2	3	0	2	2	1	1	2	2	2	2	3	0		
CL07		0	0	0	1	2	3	1	1	0	0	1	0	2	1	2	1	0	0	1	0	0	1	0	0	2	1	2	0	
CL08		1	0	0	2	3	0	0	2	0	1	0	0	1	0	1	0	1	0	1	0	1	0	0	1	0	0	1	0	
GC09		0	0	0	0	1	1	4	1	1	0	1	0	1	2	0	1	0	1	1	1	1	0	0	1	0	2	0		
TR123		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
WO06		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
28731		0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	
SA04		0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	
28750		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
TR123		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
28756		0	0	3	0	2	2	6	3	4	2	2	1	1	1	3	2	2	4	0	0	1	2	3	2	1	2			
CG05		0	0	2	0	1	1	5	1	1	1	2	1	1	0	2	0	2	3	0	0	1	2	3	1	1	2			
WO06		0	0	1	0	1	1	1	2	3	1	0	0	0	1	1	2	0	1	0	0	0	0	0	1	0	0			
CL07		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
GC09		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
28773		0	0	0	1	0	0	0	1	0	2	0	0	1	3	0	1	1	1	0	0	0	1	2	0	1	1			
SA04		0	0	0	1	0	0	0	1	0	2	0	0	1	3	0	1	1	0	0	0	1	2	0	1	1				
WO06		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
28782		0	1	2	0	3	1	3	0	2	1	0	1	1	3	0	2	3	2	2	5	1	3	2	1	0				
CL08		0	0	1	0	1	0	0	0	1	0	0	0	0	0	0	1	1	0	0	2	0	0	0	0	0				
TR123		0	1	1	0	1	1	2	0	0	0	1	0	0	0	1	1	1	2	1	0	1	1	1	0	0				
CL07		0	0	0	0	1	0	1	0	2	0	0	1	1	0	1	0	1	0	1	3	0	1	1	1	0				
GC09		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0				
WO06		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
28792		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
CG05		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			

PDF output is not recommended for Complex Pivots. Example of PDF below for a Simple Pivot

PREC_NO1	SEX	
	Female	Male
CG05	265	271
CL07	362	288
CL08	555	442
GC09	424	364
SA04	264	235
TR123	513	418
WO06	246	215