Working with Pivot Tables in Excel 2010

Prepared for the

AWMA-MLC Young Professionals Group Lunch Meeting

January 17, 2013

Outline

- Creating a Pivot Table
- Manipulating a Pivot Table
- Formatting a Pivot Table
- Modifying a Pivot Table Summary Function
- Updating data source
- Example

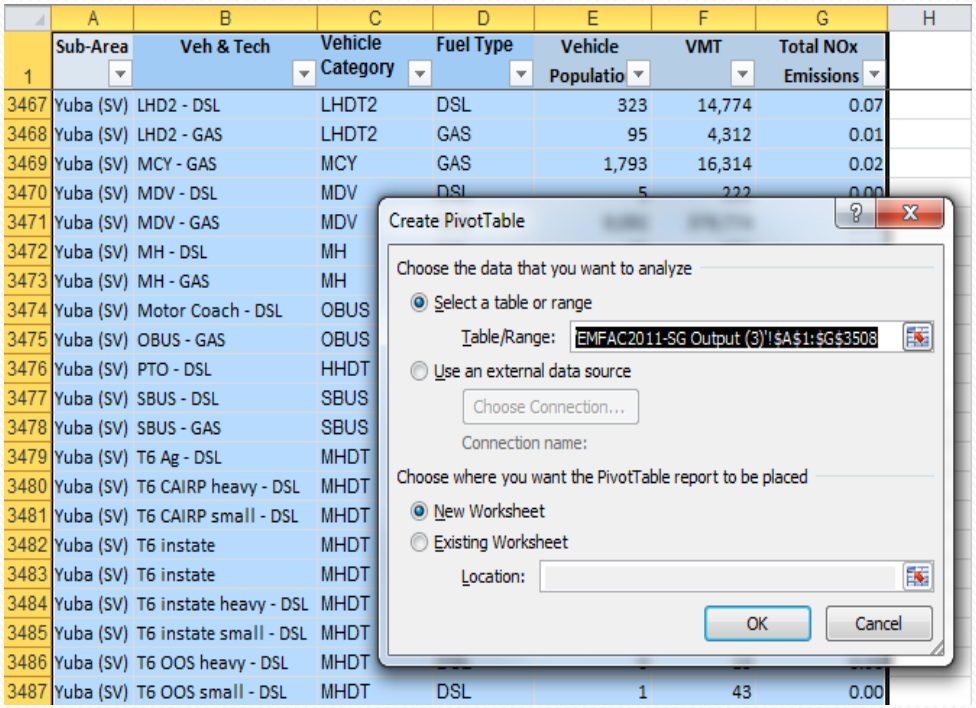
What is a Pivot Table

- A special type of summary table
- Unique to Excel
- Don’t need to create formulas to perform the calculations
- Easy to manipulate and modify: simply drag-and-drop (pivot) fields names, and results are shown immediately
- Independent of original data layout

Creating a Pivot Table - 1

* Before creating a pivot table, make sure there is no blank column.

1. Open the worksheet and click on one cell in any part of data.
2. Click the PivotTable button on the Insert tab.
3. Set up data source.
4. Select the location for the pivot table.

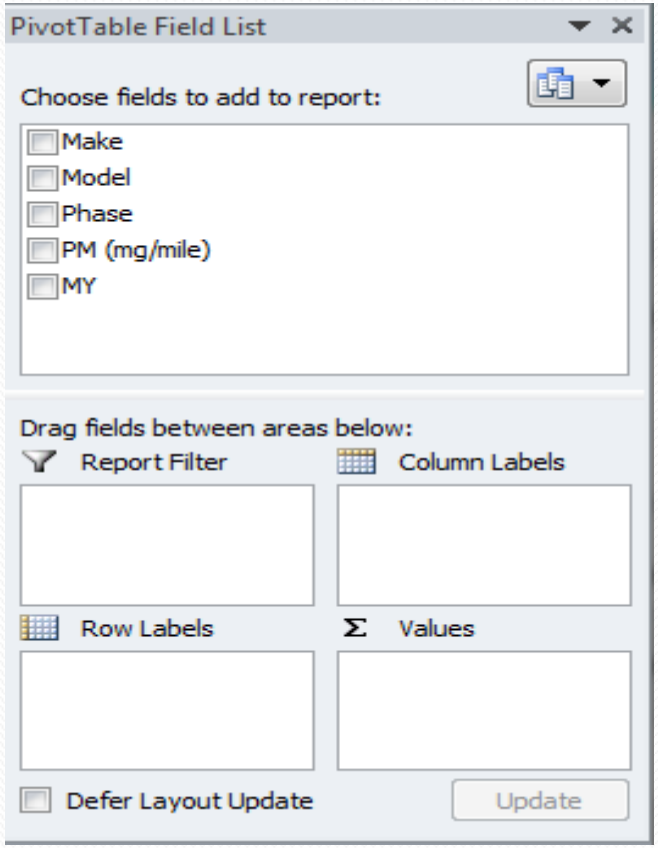


	A	B	C	D	E	F	G
1	Sub-Area	Veh & Tech	Vehicle Category	Fuel Type	Vehicle Populatio	VMT	Total NOx Emissions
3467	Yuba (SV)	LHD2 - DSL	LHDT2	DSL	323	14,774	0.07
3468	Yuba (SV)	LHD2 - GAS	LHDT2	GAS	95	4,312	0.01
3469	Yuba (SV)	MCY - GAS	MCY	GAS	1,793	16,314	0.02
3470	Yuba (SV)	MDV - DSL	MDV	DSL	5	222	0.00
3471	Yuba (SV)	MDV - GAS	MDV				
3472	Yuba (SV)	MH - DSL	MH				
3473	Yuba (SV)	MH - GAS	MH				
3474	Yuba (SV)	Motor Coach - DSL	OBUS				
3475	Yuba (SV)	OBUS - GAS	OBUS				
3476	Yuba (SV)	PTO - DSL	HHDT				
3477	Yuba (SV)	SBUS - DSL	SBUS				
3478	Yuba (SV)	SBUS - GAS	SBUS				
3479	Yuba (SV)	T6 Ag - DSL	MHDT				
3480	Yuba (SV)	T6 CAIRP heavy - DSL	MHDT				
3481	Yuba (SV)	T6 CAIRP small - DSL	MHDT				
3482	Yuba (SV)	T6 instate	MHDT				
3483	Yuba (SV)	T6 instate	MHDT				
3484	Yuba (SV)	T6 instate heavy - DSL	MHDT				
3485	Yuba (SV)	T6 instate small - DSL	MHDT				
3486	Yuba (SV)	T6 OOS heavy - DSL	MHDT				
3487	Yuba (SV)	T6 OOS small - DSL	MHDT	DSL	1	43	0.00

5. Click OK – Excel adds a blank pivot table and displays a PivotTable Field List task pane.

Creating a Pivot Table - 2

6. Assign the fields in the Pivot Table Field List task pane to the various parts of the table.



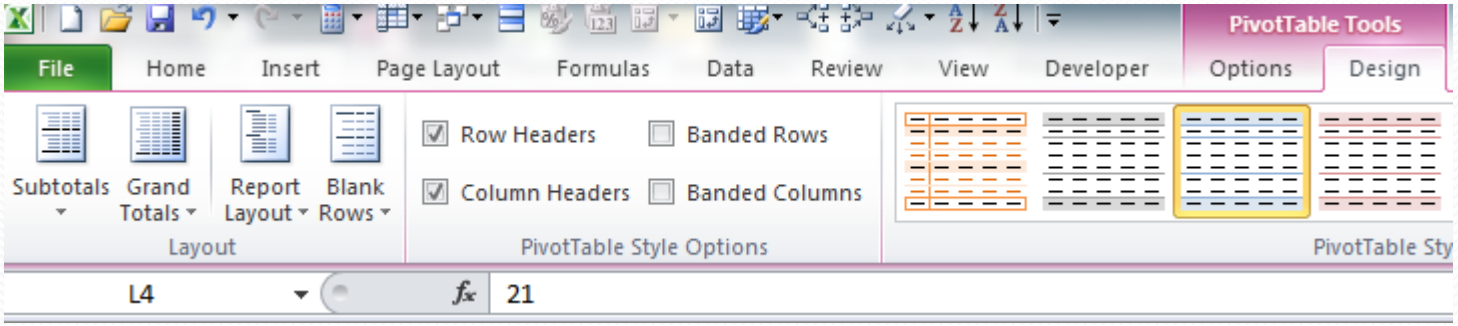
Manipulating a Pivot Table

- Remove a field from the table
- Add a field to the table
- Move an existing field to a new place in the table - pivoting the table's fields

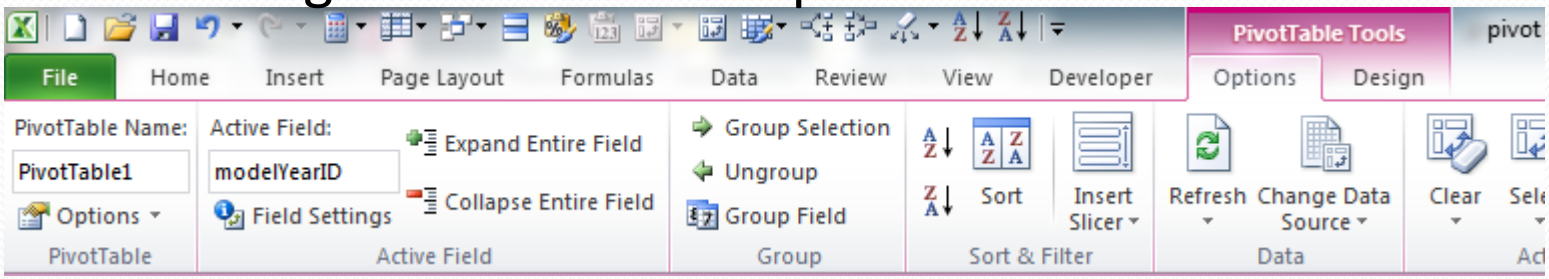
Formatting a Pivot Table

- PivotTalbe Tools - Context sensitive ribbon

- Refining the pivot table style

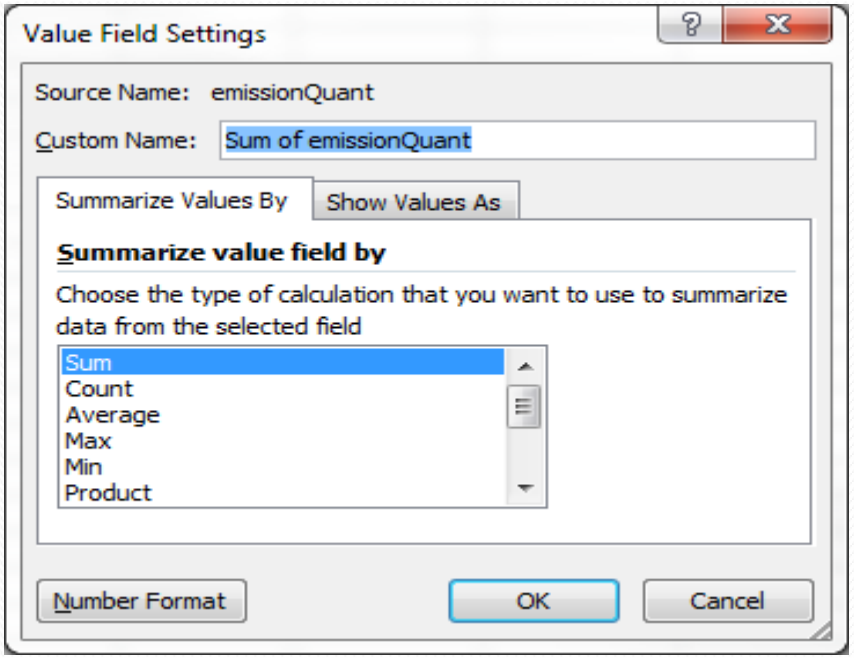


- Formatting the values in the pivot table



Modifying a Pivot Table Summary Function

- Summary Function:
  - Sum,
  - Count,
  - Average,
  - Min/Max,
  - StdDev/StdDevp,
  - Var/ Varp …



- By default, Excel uses the Sum function for the numeric field and Count function for the text field

Updating Data Source

- Change Data Source
- Refresh

Example

- Prepare a summary table showing average and max NOx emissions in Sacramento county organized by fuel type and vehicle category.