After the combined data files have been cleaned and scrubbed we are ready to create the Pivot Table.

A. Select any cell with data on the **SalesData Sheet**, for example cell C7.

	A	B	C	D	E	F	G	H	I	J	K	L	M
1		**MegaCorp, Inc.**			**Sales Data FY 2018**								
2													
3	**CustId**	**ProductID**	**Product**	**Salesperson**	**Title**	**Commission rate**	**Region**	**Customer**	**Qtr1**	**Qtr2**	**Qtr3**	**Qtr4**	**Total**
4	86090	101	Miniserver	Joan Townse	Sales Associ	3.0%	North	Small busir	$ 11,666	$ 17,479	$ 21,350	$ 17,406	$ 67,902
5	86097	101	Miniserver	Raul Carillo	Sales Associ	3.5%	South	Small busir	$ 20,627	$ 16,129	$ 18,624	$ 13,300	$ 68,680
6	86101	104	Megaserve	Maria Garcia	Senior Sales	4.5%	North	Governme	$ 37,282	$ 65,482	$ 87,917	$119,126	$309,806
7	86102	106	Megaserv	Raul Carillo	Sales Associ	3.5%	North	Governme	$100,426	$ 83,366	$119,477	$ 31,733	$335,002
8	86107	106	Megaserve	Tomas Vilas	Senior Sales	4.0%	West	Small busir	$ 23,470	$ 18,979	$ 23,816	$ 15,643	$ 81,908

B. On the Insert tab select Pivot Table
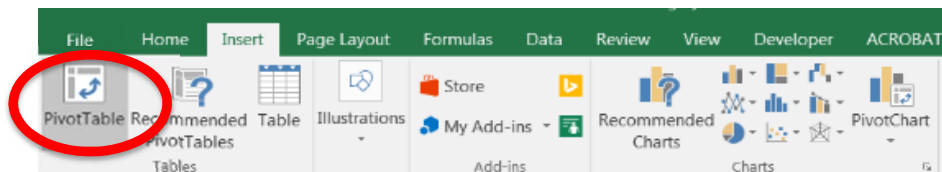
C. The **Table/Range** is defined based on the number of rows and columns in the data
Place the Pivot Table on an Existing Worksheet: **'Pivot 1 Product by Salesperson'!$A$1**

Create PivotTable ? ✕

Choose the data that you want to analyze
◉ Select a table or range
Table/Range: SalesData!$A$3:$L$5020
◯ Use an external data source
Choose Connection...
Connection name:
◯ Use this workbook's Data Model

Choose where you want the PivotTable report to be placed
◯ New Worksheet
◉ Existing Worksheet
Location: 'Pivot 1 Product by Salesperson'!$A$1

Choose whether you want to analyze multiple tables
☐ Add this data to the Data Model

D. Select OK

OK   Cancel

E. Add *Total* to the **Values** section, by selecting the field and dragging it to the Values section

	A	B	C	D	E	F	G	H
1	Sum of Total							
2	860747956							

PivotTable F.. ▾ ✕

Choose fields to add to report: ⚙ ▾

Search 🔍

☐ Qtr2
☐ Qtr3
☐ ☐
☑ **Total**
More Tables...

Drag fields between areas below:

▼ Filters   ▥ Columns

≡ Rows   Σ Values
                Sum of To... ▾

F. Add *Salesperson* to the Columns section by selecting the field and dragging it to the Columns section

	A	B	C	D	E	F
1		Column Labels ▾				
2		Gary Peters	Joan Townsend	Julie Vanderwent	Maria Garcia	Raul Carillo
3	Sum of Total	94412098.6	220926613.4	82047746.2	163717842.4	127765525.8

PivotTable F.. ▾ ✕

Choose fields to add to report: ⚙ ▾

Search 🔍

☐ CustId
☐
☑ **Salesperson**
☐ Title
☐ Commission rate
☐ Region

Drag fields between areas below:

▼ Filters   ▥ Columns
                Salespers... ▾

G. Add *Products* to the Rows section by selecting the field and dragging it to
the Rows section

	A	B	C	D	E	F
1	**Sum of Total**	**Column Labels** ▾				
2	**Row Labels** ▾	**Gary Peters**	**Joan Townsend**	**Julie Vanderwent**	**Maria Garcia**	**Raul Carillo**
3	Gigaserver GZX1	10331104.6	20939729.8	72		
4	Gigaserver GZX2	8742647.6	21611955	95		
5	Maxiserver XL1	9339874	22645098.8	66		
6	Maxiserver XL2	10077644.8	21285137.6	78		
7	Megaserver MG1	11438274	20944672	79		
8	Megaserver MG2	6632699	23038864.8	81		
9	Megaserver MG3	6643938.2	26215080.2			
10	Miniserver C1	10155511.8	21870471.8	8		
11	Miniserver C2	9657143.2	18590448.8	71		
12	Miniserver C3	11393261.4	23785154.6	1		
13	**Grand Total**	**94412098.6**	**220926613.4**	**820**		

PivotTable F.. ▾   ✕

Choose fields to add to report: ⚙ ▾

Search 🔍

☐ Cust...
☑ **Product**
☑ Salesperson
☐ Title
☐ Commission rate
☐ Region

Drag fields between areas below:

▼ Filters   ‖‖ Columns
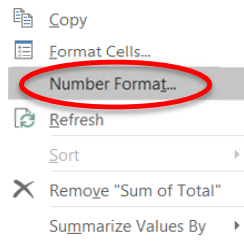   Salespers... ▾
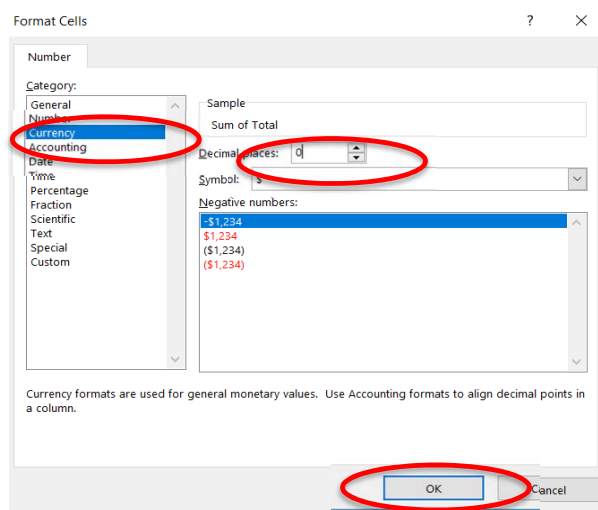
≡ Rows   Σ Values
Product   ▾   Sum of To... ▾

H. Change the format of the numbers

   (1) Right click on cell A1, which contains the heading Sum of Totals

	A	B
1	Sum of Total	Column Labels ▾
2	Row Labels ▾	Gary Peters
3	Gigaserver GZX1	10331104.6
4	Gigaserver GZX2	8742647.6
5	Maxiserver XL1	9339874

   (2) Select Number Format

📋 Copy
▤ Format Cells...
Number Format...
🔃 Refresh
   Sort ▸
✕ Remove "Sum of Total"
   Summarize Values By ▸

Format Cells   ? ✕

Number

Category:
General
Number
Currency
Accounting
Date
Time
Percentage
Fraction
Scientific
Text
Special
Custom

   (3) Currency

   (4) Decimal places 0

Sample
Sum of Total

Decimal places: 0
Symbol: $

Negative numbers:
-$1,234
$1,234
($1,234)
($1,234)

Currency formats are used for general monetary values. Use Accounting formats to align decimal points in a column.

   (5) OK

OK   Cancel

I. Change the "Sum of Totals" to "Total Sales"
   (1) Left click on cell A1, which contains the heading Sum of Totals

A1   ⋮ ✕ ✓ fx   Sum of Total

	A	B	C	D
1	Sum of Total	Column Labels ▾		
2	Row Labels ▾	Gary Peters	Joan Townsend	Julie Vanderwent
3	Gigaserver GZX1	$10,331,105	$20,939,730	$7,268,246

   (2) Type in the new heading, "Total Sales"

A1   ⋮ ✕ ✓ fx   Total Sales

	A	B	C	D
1	Total Sales	Column Labels ▾		
2	Row Labels ▾	Gary Peters	Joan Townsend	Julie Vanderwent
3	Gigaserver GZX1	$10,331,105	$20,939,730	$7,268,246
4	Gigaserver GZX2	$8,742,648	$21,611,955	$9,565,111
5	Maxiserver XL1	$9,339,874	$22,645,099	$6,654,949

J. How many of Gary Peters' clients purchased Gigaserver GZX1?

(1) For the second time , add **Total** to the **Values** section, by selecting the field and dragging to the Values section.

◢	A	B	C
1		Column Labels ▾	
2		Gary Peters	
3	Row Labels ▾	Total Sales	Sum of Total
4	Gigaserver GZX1	$10,331,105	10331104.6
5	Gigaserver GZX2	$8,742,648	8742647.6
6	Maxiserver XL1	$9,339,874	9339874
7	Maxiserver XL2	$10,077,645	10077644.8
8	Megaserver MG1	$11,438,274	11438274
9	Megaserver MG2	$6,632,699	6632699
10	Megaserver MG3	$6,643,938	6643938.2
11	Miniserver C1	$10,155,512	10155511.8
12	Miniserver C2	$9,657,143	9657143.2
13	Miniserver C3	$11,393,261	11393261.4
14	**Grand Total**	**$94,412,099**	**94412098.6**
15			
16			
17			
18			
19			
20			
21			
22			
23			
24			
25			
26			
27			
28			
29			

PivotTable Fields ▾ ✕

Choose fields to add to report: ⚙ ▾

Search 🔍

☐ Qtr1
☐ Qtr2
☐ Qtr3
☐ Qtr4
☑ **Total**

More Tables...

Drag fields between areas below:

▼ Filters

Ⅲ Columns
| Salesperson | ▾ |
| Σ Values | ▾ |

≡ Rows
| Product | ▾ |

Σ Values
| Total Sales | ▾ |
| Sum of Total | ▾ |

☐ Defer Layout Update [Update]

(2) Right click on cell C3, which contains the heading Sum of Totals

	A	B	C
1		Column Labels	
2		Gary Peters	Joan
3	Row Labels	Total Sales	Sum of Total Tota
4	Gigaserver GZX1	$10,331,105	10331104.6
5	Gigaserver GZX2	$8,742,648	8742647.6

Copy
Format Cells...
Number Format...
Refresh
Sort ▶
Remove "Sum of Total"
Summarize Values By ▶
Show Values As ▶
Value Field Settings...
PivotTable Options...
Hide Field List

(3) Select Value Field Settings

(4) Select Count

Value Field Settings ? ✕

Source Name: Total

Custom Name: Count of Total

Summarize Values By | Show Values As

Summarize value field by

Choose the type of calculation that you want to use to summarize data from the selected field

Sum
Count
Average
Max
Min
Product

Number Format | OK | Cancel

(5) Select OK

(6) Change C3 from **Count of Total** to **Count**

	A	B	C
1		Column Labels	
2		Gary Peters	Joa
3	Row Labels	Total Sales	Count of Total Tot
4	Gigaserver GZX1	$10,331,105	60
5	Gigaserver GZX2	$8,742,648	44

	A	B	C
1		Column Labels	
2		Gary Peters	Jo:
3	Row Labels	Total Sales	Count	To
4	Gigaserver GZX1	$10,331,105	60
5	Gigaserver GZX2	$8,742,648	44

K.   Gary Peters had 531 clients, of which 60 purchased Gigaserver GZX1.
     What was the average sales in dollars for Gary Peters' clients that purchased Gigaserver GZX1?

(1) Again, add *Total* to the **Values** section, by selecting the field and dragging it
     to the Values section.

	A	B	C	D
1		Column Labels ▼		
2		Gary Peters		J
3	Row Labels ▼	Total Sales	Count	Sum of Total T
4	Gigaserver GZX1	$10,331,105	60	10331104.6
5	Gigaserver GZX2	$8,742,648	44	8742647.6
6	Maxiserver XL1	$9,339,874	50	9339874
7	Maxiserver XL2	$10,077,645	58	10077644.8
8	Megaserver MG1	$11,438,274	61	11438274
9	Megaserver MG2	$6,632,699	41	6632699
10	Megaserver MG3	$6,643,938	38	6643938.2
11	Miniserver C1	$10,155,512	58	10155511.8
12	Miniserver C2	$9,657,143	55	9657143.2
13	Miniserver C3	$11,393,261	66	11393261.4
14	**Grand Total**	**$94,412,099**	**531**	**94412098.6**

PivotTable Fields

Choose fields to add to report:

Search

- ☐ Qtr1
- ☐ Qtr2
- ☐ Qtr3
- ☐ Qtr4
- ☑ **Total**

More Tables...

Drag fields between areas below:

▼ Filters

▥ Columns
- Salesperson ▼
- Σ Values ▼

☰ Rows
- Product ▼

Σ Values
- Total Sales ▼
- Count ▼
- Sum of Total ▼

(2) Right click on cell E3, which contains the heading Sum of Totals

	A	B	C	D	E
1		Column Labels ▼			
2		Gary Peters			
3	Row Labels ▼	Total Sales	Count	Average	Sum of Total
4	Gigaserver GZX1	$10,331,105	60	$172,185	10331104.6

- 📋 Copy
- 🗏 Format Cells...
- Number Format...
- ⟳ Refresh
- Sort ▶
- ✕ Remove "Sum of Total"
- Summarize Values By ▶
- Show Values As ▶
- 🛈 Value Field Settings...
- PivotTable Options...
- 🗏 Hide Field List

(3) Select Show Values As

- ✓ No Calculation
- % of Grand Total
- % of Column Total
- % of Row Total
- % Of...
- % of Parent Row Total

(4) Select % of Column Total

(5) Change E3 from **Sum of Total** to **% of Column**

	A	B	C	D	E
1		Column Labels ▾			
2		Gary Peters			
3	Row Lab▾	Total Sales	Count	Averag	Sum of Total
4	Gigaserver GZX1	$10,331,105	60	$172,185	10.94%

	A	B	C	D	E
1		Column Labels ▾			
2		Gary Peters			
3	Row Lab▾	Total Sales	Count	Average	%
4	Gigaserver GZX1	$10,331,105	60	$172,185	10.94%

L. What is the rank of the sales of the product as compared to the sales of the salesperson?

(1) Again, add Total to the Values section, by selecting the field and dragging it to the Values section.

PivotTable F..   ▾   ✕

Choose fields to add to report: ⚙ ▾

Search   🔍

☐ Commission rate
☐ Region
☐ Customer type
☐ Qtr1
☐ Qtr2
☐ Qtr3
☐ Qtr4
☑ **Total**
More Tables…

Drag fields between areas below:

▼ Filters   ▥ Columns
                       Salespers… ▾
                       Σ Values   ▾

≡ Rows   Σ Values
Product   ▾   Total Sales ▾
                       Count   ▾
                       Average   ▾
                       %   ▾
                       Sum of To…   ▾
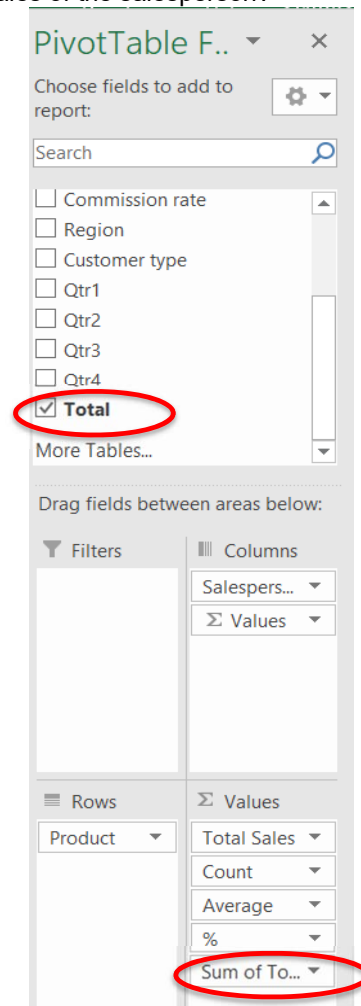
(2) Right click on cell F3, which contains the heading Sum of Totals

✓ No Calculation

📋 Copy   % of Grand Total

▤ Format Cells…   % of Column Total

    Number Format…   % of Row Total

🔁 Refresh   % Of…

    Sort   ▸   % of Parent Row Total

✕ Remove "Sum of Total"   % of Parent Column Total

    Summarize Values By   ▸   % of Parent Total…

(3) Select Show Values As   Show Values As   Difference From…

🔢 Value Field Settings…   % Difference From…

    PivotTable Options…   Running Total In…

🔲 Hide Field List   % Running Total In…
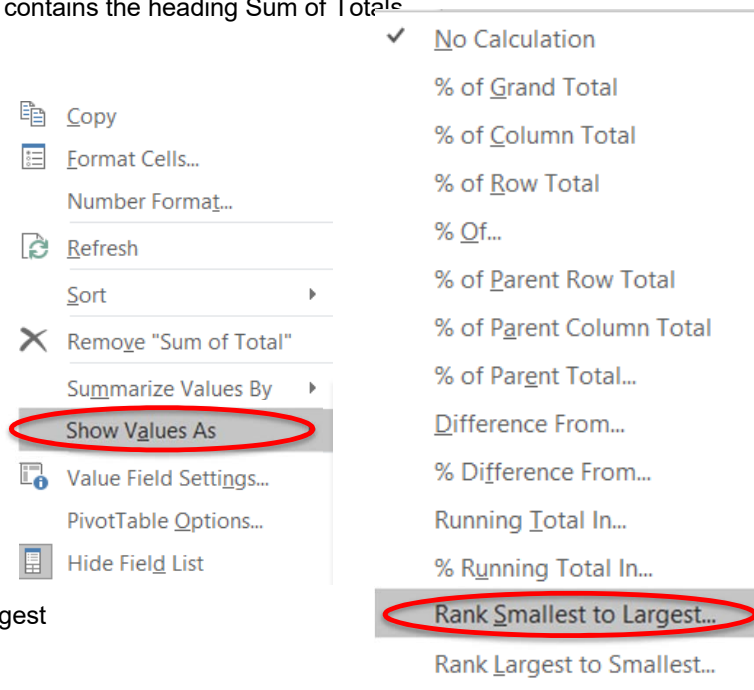
(4) Select Rank Smallest to Largest   Rank Smallest to Largest…

                                     Rank Largest to Smallest…

(5) Select product

Calculation: Rank Smallest to Largest

Base Field: **Product**

OK   Cancel
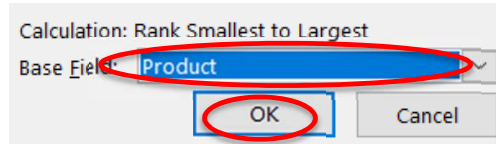
(6) Select OK

(7) Change F3 to Rank and right justify

	A	B	C	D	E	F
1		**Column Labels** ▾				
2		**Gary Peters**				Jo
3	**Row Lab** ▾	**Total Sales**	**Count**	**Average**	**%**	**Rank**
4	Gigaserver GZX1	$10,331,105	60	$172,185	10.94%	8
5	Gigaserver GZX2	$8,742,648	44	$198,697	9.26%	3
6	Maxiserver XL1	$9,339,874	50	$186,797	9.89%	4
7	Maxiserver XL2	$10,077,645	58	$173,752	10.67%	6
8	Megaserver MG1	$11,438,274	61	$187,513	12.12%	10
9	Megaserver MG2	$6,632,699	41	$161,773	7.03%	1
10	Megaserver MG3	$6,643,938	38	$174,840	7.04%	2
11	Miniserver C1	$10,155,512	58	$175,095	10.76%	7
12	Miniserver C2	$9,657,143	55	$175,584	10.23%	5
13	Miniserver C3	$11,393,261	66	$172,625	12.07%	9
14	**Grand Total**	**$94,412,099**	**531**	**$177,801**	**100.00%**	

M. Change the column width

	A	B	C	D	E	F
1		**Column Labels** ▾				
2		**Gary Peters**				Jo
3	**Row Lab** ▾	**Total Sales**	**Count**	**Average**	**%**	**Rank**
4	Gigaserver GZX1	$10,331,105	60	$172,185	10.94%	8
5	Gigaserver GZX2	$8,742,648	44	$198,697	9.26%	3
6	Maxiserver XL1	$9,339,874	50	$186,797	9.89%	4
7	Maxiserver XL2	$10,077,645	58	$173,752	10.67%	6
8	Megaserver MG1	$11,438,274	61	$187,513	12.12%	10
9	Megaserver MG2	$6,632,699	41	$161,773	7.03%	1
10	Megaserver MG3	$6,643,938	38	$174,840	7.04%	2
11	Miniserver C1	$10,155,512	58	$175,095	10.76%	7
12	Miniserver C2	$9,657,143	55	$175,584	10.23%	5
13	Miniserver C3	$11,393,261	66	$172,625	12.07%	9
14	**Grand Total**	**$94,412,099**	**531**	**$177,801**	**100.00%**	

N. Draw a thick outside border around B2:F14, copy the format to AJ.

	A	B	C	D	E	F	G	H	I	J	K
1		Column Labels									
2		Gary Peters					Joan Townsend				
3	Row Lab	Total Sales	Count	Average		% Rank	Total Sales	Count	Average		% Rank
4	Gigaserver GZX1	$10,331,105	60	$172,185	10.94%	8	$20,939,730	124	$168,869	9.48%	2
5	Gigaserver GZX2	$8,742,648	44	$198,697	9.26%	3	$21,611,955	124	$174,290	9.78%	5
6	Maxiserver XL1	$9,339,874	50	$186,797	9.89%	4	$22,645,099	132	$171,554	10.25%	7
7	Maxiserver XL2	$10,077,645	58	$173,752	10.67%	6	$21,285,138	124	$171,654	9.63%	4
8	Megaserver MG1	$11,438,274	61	$187,513	12.12%	10	$20,944,672	120	$174,539	9.48%	3
9	Megaserver MG2	$6,632,699	41	$161,773	7.03%	1	$23,038,865	133	$173,225	10.43%	8
10	Megaserver MG3	$6,643,938	38	$174,840	7.04%	2	$26,215,080	146	$179,555	11.87%	10
11	Miniserver C1	$10,155,512	58	$175,095	10.76%	7	$21,870,472	127	$172,208	9.90%	6
12	Miniserver C2	$9,657,143	55	$175,584	10.23%	5	$18,590,449	112	$165,986	8.41%	1
13	Miniserver C3	$11,393,261	66	$172,625	12.07%	9	$23,785,155	136	$174,891	10.77%	9
14	Grand Total	$94,412,099	531	$177,801	100.00%		$220,926,613	1278	$172,869	100.00%	
15											

	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
1															
2	Julie Vanderwent					Maria Garcia					Raul Carillo				
3	Total Sales	Count	Average		% Rank	Total Sales	Count	Average		% Rank	Total Sales	Count	Average		% Rank
4	$7,268,246	38	$191,270	8.86%	3	$16,781,015	98	$171,235	10.25%	6	$11,406,506	67	$170,246	8.93%	2
5	$9,565,111	56	$170,806	11.66%	9	$17,306,195	99	$174,810	10.57%	9	$12,404,225	73	$169,921	9.71%	5
6	$6,654,949	42	$158,451	8.11%	1	$15,672,897	89	$176,100	9.57%	4	$14,299,376	85	$168,228	11.19%	10
7	$7,867,152	48	$163,899	9.59%	4	$16,327,606	96	$170,079	9.97%	5	$13,990,763	83	$168,563	10.95%	7
8	$7,900,355	50	$158,007	9.63%	5	$19,398,938	115	$168,686	11.85%	10	$12,630,125	73	$173,015	9.89%	6
9	$8,115,866	52	$156,074	9.89%	6	$14,498,264	86	$168,584	8.86%	1	$12,281,924	73	$168,246	9.61%	4
10	$9,054,447	52	$174,124	11.04%	8	$14,702,189	91	$161,563	8.98%	2	$14,287,639	91	$157,007	11.18%	9
11	$8,435,475	48	$175,739	10.28%	7	$16,863,146	98	$172,073	10.30%	7	$11,036,330	70	$157,662	8.64%	1
12	$7,149,786	42	$170,233	8.71%	2	$15,056,866	95	$158,493	9.20%	3	$13,991,226	80	$174,890	10.95%	8
13	$10,036,359	59	$170,108	12.23%	10	$17,110,727	94	$182,029	10.45%	8	$11,437,413	75	$152,499	8.95%	3
14	$82,047,746	487	$168,476	100.00%		$163,717,842	961	$170,362	100.00%		$127,765,526	770	$165,929	100.00%	

	AA	AB	AC	AD	AE	AF	AG	AH	AI	AJ
1										
2	Tomas Vilas					Total Total Sales	Total Count	Total Average	Total %	Total Rank
3	Total Sales	Count	Average		% Rank					
4	$18,863,569	102	$184,937	10.97%	9	$85,590,171	489	$175,031	9.94%	4
5	$17,600,249	96	$183,336	10.24%	6	$87,230,382	492	$177,298	10.13%	7
6	$18,216,433	112	$162,647	10.60%	7	$86,828,628	510	$170,252	10.09%	5
7	$19,100,881	100	$191,009	11.11%	10	$88,649,184	509	$174,163	10.30%	9
8	$14,527,917	91	$159,647	8.45%	2	$86,840,281	510	$170,275	10.09%	6
9	$16,625,341	97	$171,395	9.67%	3	$81,192,959	482	$168,450	9.43%	1
10	$17,234,326	92	$187,330	10.03%	5	$88,137,619	510	$172,819	10.24%	8
11	$13,955,686	91	$153,359	8.12%	1	$82,316,621	492	$167,310	9.56%	2
12	$18,861,492	106	$177,939	10.97%	8	$83,306,962	490	$170,014	9.68%	3
13	$16,892,235	103	$164,002	9.83%	4	$90,655,150	533	$170,085	10.53%	10
14	$171,878,130	990	$173,614	100.00%		$860,747,956	5017	$171,566	100.00%	