

Automation with Excel Pivot Tables

Teksouth Tips and Tricks

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Problem Statement



Time is wasted daily

Downloading the same data and Formatting the same report



AUTOMATE

- Use Excel Pivot Tables (and Power Query) to automate the process
- Spend your precious time analyzing data and actually doing your job





Objectives

- 1. Download data
- 2. Connect to data
- 3. Transform data
- 4. Create Pivot Table
- 5. Create Pivot Chart
- 6. Refresh Data



Objective 1

Download Data



1 - Download Data

- CRIS 7 new perspectives to be released soon
- Consolidated Transaction Register (CTR)
 - Combined <u>DEAMS</u>, <u>BQ</u>, <u>AFM</u> and <u>EFD</u> transactional data

Create New Data Source									
	+ CREATE NEW DATASOURCE	▲ Import Datasource File(s)	1 Import Legacy File						
F	Perspective								
	Select a perspective		\$						
	Select a perspective ABIDES 1002 AFMSum AFMTrans AFSAT Combined STH CPAS Trans								
479,8	Consolidated Transaction Register (CTR) CPAS CPAS Hist Authority CPAS Hist Authority CPAS Hist Transactions CPAS Transactions CTR Stablance CTR Open Commitments CTR Open Commitments CTR Open Travel CTR Summary DBT (Field Site EOM) DEAMS GL DSR (Field Site ODL)								



1 - Download Data

- Export Data as excel
- Save in folder
 - Don't put dates / specifics in file name
 - Don't save in folder particular to a certain FY or month
 - Standardize so that links don't have to be fixed every year / month / day
- Don't open or change this file

• Keyboard Shortcut: CTL + Shift + N = New Folder



Objective 2

Connect to Data



- Create new Excel workbook
- Will use this workbook to connect to the data and make our changes/create our pivot tables





Office 365 & 2019

• Date Tab on Ribbon > Get Data > From File > From Excel Workbook





Office 2016

• Date Tab on Ribbon > New Query > From File > From Workbook







- Select the file you saved previously
- Click Import
- Select Table1
- Click 'Transform Data' ('Edit' in Office 2016)

 This PC > Windows (C) > Daily SOF > 001, Data Organize * New folder Rownak family New Shooting Sport Proof Top 320 Ringtones OneDrive - Personal OneDrive - Teksouth Corporation This PC 	✓ ♥ P Search 00* Date modified 1/17/2023 12:16 PM	LData 	Select multiple items Display Options * Select multiple items Display CTR CTR	6	AAJ/ADSN null 387700 387700 387700 387700	Appropriation BA 3400 3400 3400 3400 3400	BLIN null - null - null - null - null -	BPAC	CCAC/ESP	Com
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Con priva (c)										
File name: CTR xlsx	 Excel Files (*.xl*;* 	xisx;*xism;*xis ∼			<					>



Objective 3

Transform Data



3 - Transform data

- Fix the data types in Power Query
 - Select all text columns (AAI/ADSN to Period Name)
 - Home Tab > Data Type Drop down menu > Select 'Text'
 - Click Replace Current

Home	Transform	Add	Column	View																	
Refresh Preview *	Advanced Edi	tor	Choose Columns ▼ Manage	Remove Columns •	Keep Rows •	Remove Rows •	AJ AJ Sort	Split Column	Group * By	Data	a Type: Any • Decimal Number Currency Whole Number	G M M M C	erge Queries * opend Queries * ombine Files Combine	Manage Parameters ▼ Parameters	Data source settings Data Sources	New Source	∙ es •				
]	<	×	~	<i>fx</i> =	Table.1	Fransform	nColum	nnTypes	(Table1		Percentage Date/Time	64.Тур	pe}, {"Appropr	iation", In	nt64.Type},	{"BA", Int64	.Type},	{"Commodity", ty	pe text}	, {"Cost Cer	nter/
nei			Legacy		A ^B C PE	C DEAMS		-	A ^B C PEC 1	1	Date	- /	^{AB} C SAG	Ψ.	A ^B C Source	Ŧ	ABC Syst	em 🔻	AB _C Perio	d Name	Ŧ
		1									Time	null			AFM		Legacy		AUG-FY-2	2	
		2									Date/Time/Timezone	null			AFM		Legacy		AUG-FY-2	2	
		3									Duration	null			AFM		Legacy		JUL-FY-22		
		4									Text	null			AFM		Legacy		JUN-FY-2		
		5									True/False	null			AFM		Legacy		SEP-FY-22		
		6									Pinany	null			AFM		DEAMS		JUL-FY-22		
		7									binary	null			AFM		DEAMS		MAY-FY-2	2	
		8										null			AFM		DEAMS		OCT-FY-2	2	
		9										null			AFM		DEAMS		SEP-FY-22		
		10															~~ ~ ~ ~ ~ ~				

Change Column Type

The selected column has an existing type conversion. Would you like to replace the existing conversion, or preserve the existing conversion and add the new conversion as a separate step?



⇒ | Table1 - Power Query Editor



Objective 4

Create a Pivot Table



• Home > Close & Load Drop Down Arrow > Close & Load To...



- We want to only insert a Pivot Table
- We do not want a table



Microsoft 365

Import Data	?	×						
Select how you want to view this data i	n your w	vorkbook.						
I able <								
∎ <mark>t</mark> ∰ ○ Pivot <u>C</u> hart								
Where do you want to put the data?								
O Existing worksheet:								
=\$A\$1		1 I						
New worksheet Add this data to the Data Model								
Properties • OK	Ca	ancel						



Office 2016

Load To

Select how you want to view this data in your workbook.

Table O

Only Create Connection

Select where the data should be loaded.

- New worksheet
- O Existing worksheet:

Add this data to the Data Model





Office 2016

- Create a new worksheet > Insert Ribbon Tab > PivotTable
- Use an external data source > Choose Connection
- Select connection > open



Create PivotTable			?	×
Choose the data that	t you want to analyze			
◯ <u>S</u> elect a table of	or range			
Table/Ran	ge:			
● <u>U</u> se an externa	l data source			
Choose	Connection			
Connection	n name:			
🔘 Use this workb	ook's Data Model			
Choose where you w	ant the PivotTable repo	ort to be placed		
O New Workshee	et			
<u>Existing Works</u>	heet			
Location:	Sheet5!\$A\$1			1
Choose whether you	want to analyze multip	le tables		
Add this data t	o the Data <u>M</u> odel			





1	PivotTable Fields	\checkmark >
	Choose fields to add to report:	Drag fields between areas below:
	Search 🔎	▼ Filters
	 AAI/ADSN Appropriation BA Commodity ▼ Cost Center/RCCC Dir Adv 	
	Dir AEP Dir AEU Dir AEU Dir Avail Auth Richter	
	Dir Commits	Columns
	Dir GrObl	∑ Values ▼
	Dir Sub Auth	
	Dir UnComm Avail	
	Dir UnComm Total	
	Dir UnObl Avail	
	Dir UnObl Total	
	FAD Ann Amt	
	FAD Qtr Amt Total	Rows
	FC FC	Cost Contor/PCCC
	Fund	Cost Center/ICCC
	FY (4 Char)	
	Object Class Object Class Title	
	Operating Entity	
	PEC DEAMS	
	PEC Legacy	
	PEC Title	
	Period Date	
	Period Name Post Date	Σ Values
	SAG	Sum of Dir Total Auth 🔻
	Source	Sum of Dir GrObl 🔻
	System	Sum of Dir UnObl Total 🔻
	Moro Tabler	

Let's create our Pivot

	А	В	С	D	
1		Values			
2	Cost Center/RCCC 🔽	Sum of Dir Total Auth	Sum of Dir GrObl	Sum of Dir UnObl Total	
3		-	-	-	
4	101J12	650,200.00	650,962.67	(762.67)	
5	101J1B	211,900.00	209,880.82	2,019.18	
6	101J1E	49,800.00	49,605.97	194.03	
7	101J1G	317,700.00	286,200.43	31,499.57	
8	101J23	936,200.00	934,321.27	1,878.73	
9	101J24	579,500.00	579,770.73	(270.73)	
10	101J25	655,500.00	651,771.28	3,728.72	
11	300000	11,513,400.00	6,415,606.09	5,097,793.91	
12	300001	11,657,400.00	3,426,908.92	8,230,491.08	
13	300003	935,400.00	940,293.78	(4,893.78)	
14	300007	1,000.00	1,000.00	-	
15	30010A	-	1,653.94	(1,653.94)	
16	34FJG1	-	_	-	
17	300120	-	81,511.77	(81,511.77)	
18	3001A0	-	3,970.17	(3,970.17)	
19	300100	-	2 746 59	(2 746 59)	



Problem: We want to hide RCCCs that have \$0 dollars in all fields.

	Values	·	·
Cost Center/RCCC 🔽	Sum of Dir Total Auth	Sum of Dir GrObl	Sum of Dir UnObl Total
	-	-	-
101J12	650,200.00	650,962.67	(762.67)
101J1B	211,900.00	209,880.82	2,019.18
101J1E	49,800.00	49,605.97	194.03
101J1G	317,700.00	286,200.43	31,499.57
101J23	936,200.00	934,321.27	1,878.73
101J24	579,500.00	579,770.73	(270.73)
101J25	655,500.00	651,771.28	3,728.72
300000	11,513,400.00	6,415,606.09	5,097,793.91
300001	11,657,400.00	3,426,908.92	8,230,491.08
300003	935,400.00	940,293.78	(4,893.78)
300007	1,000.00	1,000.00	-
30010A	-	1,653.94	(1,653.94)
34FJG1	-	-	-



Solution Step 1: Create a Helper Calculated fields



Insert Ca	lculated Field						?	\times		
<u>N</u> ame:	Helper (TotalAuth	, GrObsl)	~	1	<u>⊿</u> odify					
For <u>m</u> ula:	='Dir Total Auth'+	='Dir Total Auth'+'Dir GrObl'								
<u>F</u> ields:										
Dir Avail / Dir Comn Dir GrCor	Auth nits nm		^							
Dir GrObl Dir Sub A Dir Total /	uth Auth									
Dir UnCo Dir UnCo	mm Avail mm Total		~							
		Insert Fi <u>e</u> l	d							
					ОК		Clo	se		



Solution Step 2: Use a Value Filter

_						-		
1	V	alues				·		
2	Cost Center/RCCC 🔽 S	um of Dir T	otal	Auth	Sum of Dir GrObl	Sum of Dir UnObl Tota	Sum of Helper (TotalAuth, GrObsl)	
A Z	Sort A to Z			-	-	_		
7	_			0.00	650,962.67	(762.67)	1,301,162.67	
Â	S <u>o</u> rt Z to A			0.00	209,880.82	2,019.18	421,780.82	
	More Sort Options		0.00	49,605.97	194.03	99,405.97		
				0.00	286,200.43	31,499.57	603,900.43	
5	<u>C</u> lear Filter From "Cost Ce	enter/RCCC"		0.00	934,321.27	1,878.73	1,870,521.27	
	Label Filters		>	0.00	579,770.73	(270.73)	1,159,270.73	
				n nn	654 774 00	3,728.72	1,307,271.28	
	<u>V</u> alue Filters		/	X	<u>C</u> lear Filter	5,097,793.91	17,929,006.09	
	Search		ρ		Fauala	8,230,491.08	15,084,308.92	
			~		<u>-</u> quais	(4,893.78)	1,875,693.78	
					Does <u>N</u> ot Equal	-	2,000.00	
	- I 101/12					(1,653.94)	1,653.94	
				<u>G</u> reater Than	-	-		
	- ✓ 101J1E				Greater Than <u>O</u> r Equ	ual To (81,511.77)	81,511.77	
	- 🗹 101J1G					(3,970.17)	3,970.17	
	- 🗹 101J23				<u>L</u> ess Ihan	(2,746.59)	2,746.59	
	- 🗹 101J24				Less Than Or E <u>q</u> ual	То	8,000.00	
	- 🗹 101J25					(1,729.61)	1,729.61	
	300000				Bet <u>w</u> een	(355,057.44)	375,057.44	
	- 300001				Not Retween	2,582,882.18	4,426,317.82	
	- 300003				Hot <u>b</u> etween	54.300.00	54,300.00	



Solution Step 2: Use a Value Filter

	• • • • • • • • • • • • • • • • • • • •				_						
۷	alue Filter (Cost Center/RCCC)					?	\times				
Sł	Show items for which										
	Sum of Dir Total Auth	\sim	does not equal	v							
	Sum of Dir Total Auth	~									
	Sum of Dir GrObl				OK	<u> </u>					
	Sum of Dir UnObl Total	_			ŬK	Ca	ncei				
	Sum of Helper (TotalAuth, GrObsl)		1,/29.61		(1,729.61)						



	Values			
Cost Center/RCCC 🕶	Sum of Dir Total Auth	Sum of Dir GrObl	Sum of Dir UnObl Total	Sum of Helper (TotalAuth, GrObsl)
101J12	650,200.00	650,962.67	(762.67)	1,301,162.67
101J1B	211,900.00	209,880.82	2,019.18	421,780.82
101J1E	49,800.00	49,605.97	194.03	99,405.97
101J1G	317,700.00	286,200.43	31,499.57	603,900.43
101J23	936,200.00	934,321.27	1,878.73	1,870,521.27
101J24	579,500.00	579,770.73	(270.73)	1,159,270.73
101J25	655,500.00	651,771.28	3,728.72	1,307,271.28
300000	11,513,400.00	6,415,606.09	5,097,793.91	17,929,006.09
300001	11,657,400.00	3,426,908.92	8,230,491.08	15,084,308.92
300003	935,400.00	940,293.78	(4,893.78)	1,875,693.78
300007	1,000.00	1,000.00	-	2,000.00
30010A	-	1,653.94	(1,653.94)	1,653.94
300120	-	81,511.77	(81,511.77)	81,511.77



Problem: If we want to also manually filter on RCCC, the value filter is removed.

1		۱	/alues
2	Cost Center/RCCC	,T	Sum of Dir Total A
A Z \	, <u>S</u> ort A to Z		C ,
Z A	, S <u>o</u> rt Z to A		(
	<u>M</u> ore Sort Options		(r
5	Clear Filter From "Co	ost C	enter/RCCC"
	<u>L</u> abel Filters		> [
✓	<u>V</u> alue Filters		>
			Ą
	 ■ (Select All) ■ 101J12 ■ 101J18 ■ 101J16 ■ 101J23 ■ 101J24 ■ 101J25 ■ 300000 ■ 300001 ■ 300003 ■ 300007 		
	OF	<	Cancel

	A	В	C	D	E
1	Value	5			
2	Cost Center/RCCC 团 Sum	of Dir Total Auth	Sum of Dir GrObl	Sum of Dir UnObl Total	n of Helper (TotalAuth, GrObsl)
Ą	Sort A to Z	-	-	-	-
2 *	_	D.00	6,415,606.09	5,097,793.91	17,929,006.09
Ă↓	S <u>o</u> rt Z to A	0.00	3,426,908.92	8,230,491.08	15,084,308.92
	More Sort Options	0.00	940,293.78	(4,893.78)	1,875,693.78
		0.00	1,000.00	-	2,000.00
٦×	<u>C</u> lear Filter From "Cr. Center,	/RCCC" -	1,653.94	(1,653.94)	1,653.94
	Label Filters	> -	-	-	-
		_	81,511.77	(81,511.77)	81,511.77
	Value Filters	-	3,970.17	(3,970.17)	3,970.17
	Search	<u> </u>	2,746.59	(2,746.59)	2,746.59
~	- (Select All)	0.00	4,000.00	-	8,000.00
		-	1,729.61	(1,729.61)	1,729.61
		0.00	365,057.44	(355,057.44)	375,057.44
	101J1B	0.00	921,717.82	2,582,882.18	4,426,317.82
		0.00		E4 200 00	E4 200 00



Solution: Turn on 'Allow multiple filters per field' in Pivot Table Options

Se	arch the menus		PivotTable Options	? ×
	<u>С</u> ор у		PivotTable Name: PivotTable1	
- -	<u>F</u> ormat Cells		Layout & Format Totals & Filters Display Printing Data	a Alt Text
Ļ	Number Forma <u>t</u>		Grand Totals Show grand totals for rows	
B	<u>R</u> efresh		✓ Show grand totals for columns Filters	
5	Sort	>	Subtotal filtered page items	
X	Remo <u>v</u> e "Sum of Dir GrObl"		Sorting	
5)	Su <u>m</u> marize Values By	>	✓ Use Custom Lists when sorting	
)	Show V <u>a</u> lues As	>		
+=	Show D <u>e</u> tails			
I.	Value Field Setti <u>n</u> gs			
\$	PivotTable <u>O</u> ptions			
	Hide Fiel <u>d</u> List		ОК	Cancel

To get to Pivot Table Options, Right-Click Anywhere inside the pivot table.



Problem:

You'd like to quickly and easily switch (filter) between the different BAs and Commodities.



Solution: Use Slicers

- PivotTable Analyze Tab > Insert Slicer
- Check mark BA and Commodity > Click Ok

View	Autom	ate D	eveloper	Add-i	ns Help	Acro	obat	Powe	r Pivot	Р	ivotTable	Analyze	Design
ection	Insert Slicer T	Insert ïmeline Co	Filter nnections	Refresh	Change Data Source ~	a Clea	ar Selec	t Ma	ove tTable	Field	ls, Items, ⊂ Sets × To	$\int f_x$ DLAP Relations \sim	ionships
		Filter			Data		Actic	ons	1		Calo	culations	
:\Dail y SC)F∖Pam's C	aily Status	~ ~	Inser	Slicers		?	×					
					AAI/ADSN			^					
>			E		Appropriation					I	J	к	L
JnObl To	otal Sum	of Helper	(TotalAut	n,	Commodity								
(762	.67)		1,3	01	Cost Center/RC	CC							
2,019	.18		4	21	Dir Adv								
194	.03			99	Dir AEP								
31,499	.57		6		Dir AEU								
1,878	.73		1,8		Dir Avail Auth								
2 7 2 8	.75)		1,1		Dir Commits								
097 793	91		17.9	29	Dir GrComm								
230,491	.08		15.0	84	Dir GrObl								
(4,893	.78)		, 1,8	75 🗔 1	Dir Sub Auth								
				2	Dir Total Auth								
(1,653	.94)			1	Dir UnComm A	vail							
(81,511	.77)			81	Dir UnComm Te	otal							
(3,970	.17)			3		o solt		\checkmark					
(2,746	.59)			2	C	ок	Cano	el					
				8									



Formatting Slicers

• When selected, Slicer menus on the ribbon show that allow you to adjust their design.

				Pam's Daily Statu	is of Funds.xlsx 🗸							Search
F	ile Home Ins	ert Page Layout F	ormulas Data	Review View A	Automate Developer Add-	ns He	elp Acrob	oat Pov	ver Pivot S	licer		
Slic Co	cer Caption: Emmodity Re Slicer Settings Conn	port ections			→ → → → → → → → → → → → → →	Selection Pane	Align Group	Rotate	Columns: 1 Height: 0.2 Width: 1.5	\$ 6" \$ 8" \$	Ĵ∏ Heigl ☐ Widtl	nt: 2.76"
	Slicer		Slicer S	ityles		Arrange			Button	s		Size 🕠
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Co	ommodity 🔹 🗄	$\times \checkmark f_x$										
	А	В	С	D	E	F	G	Н	1	J	к	L
1 2	Cost Center/RCCC	Values Sum of Dir Total Auth	Sum of Dir GrObl	Sum of Dir UnObl Total	Sum of Helper (TotalAuth, GrOb	sl)	BA	ý				
3	101J12	650,200.00	650,962.67	(762.67)	1,301,162.	57						
4	101J1B	211,900.00	209,880.82	2,019.18	421,780.	32	00	C	• • · · ·	- 0		
5	101J1E	49,800.00	49,605.97	194.03	99,405.	97	00	Commod	ty ≫=	Ĭ×		
6	101J1G	317,700.00	286,200.43	31,499.57	603,900.	13	01	CivPay		^		
7	101J23	936,200.00	934,321.27	1,878.73	1,870,521.	27	04	Comm				
8	101J24	579,500.00	579,770.73	(270.73)	1,159,270.	73		Comm				
9	101J25	655,500.00	651,771.28	3,728.72	1,307,271.	28		Equipme	ent			
10	300000	11,513,400.00	6,415,606.09	5,097,793.91	17,929,006.	09		Other Co	ontract Svcs			
11	300001	11,657,400.00	3,426,908.92	8,230,491.08	15,084,308.	92	Ĭ			T T		
12	300003	935,400.00	940,293.78	(4,893.78)	1,875,693.	78		Printing				
13	300007	1,000.00	1,000.00	-	2,000.	00		Real Pro	perty			
14	30010A	-	1,653.94	(1,653.94)	1,653.	94						
15	300120	-	81,511.77	(81,511.77)	81,511.	77		Supplies				
16	3001A0	-	3,970.17	(3,970.17)	3,970.	17		Trans Pr	operty	~		
1/	3001D0	-	2,746.59	(2,746.59)	2,746.	59	0		0	0		



Formatting Slicers

F	ile Ho	me	Insert	Page L	ayout	Formulas	Data	Review	View	Automate	Developer	Add-ins	Help	Acrobat	Powe	er Pivot	Slicer			
Slic Co	er Caption: mmodity Slicer Settir	ngs Co	Report nnections								Bring Forward ~ Ba	Send Selec	ction Aligr	Group R	otate	Columns Height: (Width:	: 5 0.26" 0	Ĵ_] Heigh ☐ Width	t: 1.1" : 5.64"	* *
_	-	Slicer					Slicer S	Styles				Arra	nge			Butt	ons		Size	Г
Aut	toSave 💽 🤇	Off) 🖪		<i>۵</i> ،	(~ v 10	1 -= +=	s =	0 07	C:\Daily SOF	-\Pam's Daily St	tatus ∽ ⇒									
			V L		` <u> </u>			• -		,										
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5																				
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8	Cost Cent	ter/RCC		of Dir 1	Total Auti	h Sum of	Dir GrObl	Sum of Dir	UnObl Tot	al Sum of He	lper (TotalAut	th GrObsl)								
q	101112	ter, nee	c 🖂 Julii	er Dil F	550 200 00		50 962 67	Sum of Dir	(762 6	(7)		301 162 67								
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11	101J1F			-	49 800.00	, <u> </u>	49 605.97		194.0	13		99 405.97								
12	101.11G			2	317 700.00) 2	B6 200.43		31 499.5	7		603 900.43								
13	101J23				936.200.00) 9	34.321.27		1.878.7	3	1.	870.521.27								
14	101J24			5	579,500.00) 5	79,770.73		(270.7	(3)	1.	159,270.73								

**Keyboard Shortcut – New Tab = Ctl+ Left click the tab and drag **



PivotTable Fields	\sim ×
Choose fields to add to report:	Drag fields between areas below:
Search 🔎	▼ Filters
AAI/ADSN Appropriation BA Commodity Cost Center/RCCC Dir Adv Dir Adv Dir AEP Dir AEU Dir Avail Auth Dir Commits Dir GrComm Dir GrObl Dir Sub Auth Dir Total Auth Dir Total Auth Dir Gram	II Columns
Dir UnObl Avail Dir UnObl Avail Dir UnObl Total Dir UnObl Total Dir UnObl Total	E Rows
	Period Date 🔻
FAD Ann Amt FAD Qtr Amt Tot FC Fund FY(4 Char) Helper (TotalAut Object Class	
Object Class Title	Σ Values
Operating Entity PEC DEAMS PEC Legacy	Sum of Dir GrObl 🔻
PEC Title	
Period Date	
Post Date	
SAG	

Let's duplicate the tab and make a new pivot report.

- Delete the slicers
- Remove everything but GrObl
- Add System

Sum of Dir GrObl									
System	•	Total							
DEAMS		40,220,515.49							
Legacy		3,090,962.85							
Grand Total	43,311,478.34								



You can add values to a pivot more than once.



Drag and drop Dir GrObl from the field list to the Values box again



Summarization Options

**Right Click within the

value to get this menu**

B I ≡ ☆ ~ A ~ ⊞ ~ 50 .00 ≪ Values Sum of Dir GrObl Count of Dir GrObl2 Sum of Lin Group System 40,2 DEAMS 40,220,515.49 17,257.00 Search the menus 3,090,962.85 1,022.00 3,0 Legacy **Grand Total** 43,311,478.34 43,3 18,279.00 Сору Eormat Cells... Number Format... Refresh > Sort X Remove "Sum of Dir GrObl2" > Summarize Values By ✓ <u>S</u>um Show Values As > Count +∃ Show Details <u>Average</u> 12 Value Field Settings... Max Min PivotTable Options... Hide Fiel<u>d</u> List Product Distinct Count More Options...



Calculation Options

	values			D	$\tau = A$	←0.00	~1			
System 🔄 💌	Sum of Dir GrObl	Count of Dir GrObl2	Sum of Dir (в		.00 → 0	S			
DEAMS	40,220,515.49	17,257.00	40,220,5	15.49	9					
Legacy	3,090,962.85	1,022.00	3,090,9	Se	arch the menus					
Grand Total	43,311,478.34	18,279.00	43,311,4							
					<u>С</u> ор у					
				- -	<u>F</u> ormat Cells					
					Number Forma <u>t</u>					
				PC2	<u>R</u> efresh					
					<u>S</u> ort	>				
				X	Remo <u>v</u> e "Sum of Dir GrObl	2"				
					Su <u>m</u> marize Values By	>				
					Show V <u>a</u> lues As	>	~	<u>N</u> o Calculati	on	
				+Ę	Show D <u>e</u> tails			% of <u>G</u> rand	Total	
				i 🛃	Value Field Setti <u>ng</u> s			% of <u>C</u> olum	n Total	
					PivotTable <u>O</u> ptions			% of <u>R</u> ow To	otal	
				:::	Hide Fiel <u>d</u> List			% <u>O</u> f		
							-	% of Parent	Row Total	

Right Click within the value to get this menu



	Values		
System 💌	Sum of Dir GrObl	Count of Dir GrObl2	Sum of Dir GrObl2
DEAMS	40,220,515.49	17,257.00	92.86%
Legacy	3,090,962.85	1,022.00	7.14%
Grand Total	43,311,478.34	18,279.00	100.00%



Running Totals

- Swap out System for Period Date
- Turn Dir GrObl 2 back to a sum

** Right Click within the value to get this menu**

	Values							
Bariad Data	Sum of Dir GrObi	Sum a	Caliby	-i u 11 u	Δ^ Δ~ ¢	0/ 9		
10/31/2021	2,283,812.02	2	D	$\tau = \Lambda_{a}$		0.00	~	
11/30/2021	1,567,010.68	1		$T = \mathbf{x} \mathbf{x}$	- · · · · · · · · · · · · · · · · · · ·	.00 →.0 丶 /01	y	
12/31/2021	3,829,679.63	3		1				
1/31/2022	3,243,600.20	3	Sea	arch the menu	5			
2/28/2022	2,091,199.38	2	Гъ	Conv				
3/31/2022	3,175,328.94	3	니크	Cobà				
4/30/2022	2,002,909.74	2		Eormat Cells.				
5/31/2022	7,048,713.97	7		Number Forn	nat			
6/30/2022	2,756,492.85	2		Hamberrom	1142			
7/31/2022	4,846,444.05	4	æ	<u>R</u> efresh				
8/31/2022	3,996,311.94	3		Sort		>		
9/30/2022	6,503,005.41	6		<u>3</u> 011				
10/31/2022	(8,886.16)		\times	Remo <u>v</u> e "Sur	n of Dir GrObl	2"		
11/30/2022	(29,113.60)			Cumper and a M	-luce Dec	``		
Grand Total	4,909.29	42		Su <u>m</u> manze v	alues by			
Granu rotai	43,311,478.34	+3		Show V <u>a</u> lues	As	>	\checkmark	<u>N</u> o Calculation
			+Ξ	Show Details				% of <u>G</u> rand Total
				Value Field Se	attinge			% of Column Total
			E.M.	value ricia s	sco⊡39			-
			_	PivotTable <u>O</u>	ptions			26 OL ROM LOCAL
				Hide Fiel <u>d</u> Lis	t			% <u>O</u> f
								% of <u>P</u> arent Row Total
								% of P <u>a</u> rent Column Total
								% of Par <u>e</u> nt Total
								Difference From
								% Difference From
								Running <u>T</u> otal In
								% Running Total In
								Rank <u>S</u> mallest to Largest
								Rank Largest to Smallest
								Index
								<u>M</u> ore Options



Running Total

Show Values As (?	\times		
Calculation: Running Total In Base Field: Period Date				
	OK	Ca	ncel	

	Values		
Period Date 💌	Sum of Dir GrObl	Sum of Dir GrObl2	Sum of Dir GrObl3
10/31/2021	2,283,812.02	2,283,812.02	5.27%
11/30/2021	1,567,010.68	3,850,822.70	3.62%
12/31/2021	3,829,679.63	7,680,502.33	8.84%
1/31/2022	3,243,600.20	10,924,102.53	7.49%
2/28/2022	2,091,199.38	13,015,301.91	4.83%
3/31/2022	3,175,328.94	16,190,630.85	7.33%
4/30/2022	2,002,909.74	18,193,540.59	4.62%
5/31/2022	7,048,713.97	25,242,254.56	16.27%
6/30/2022	2,756,492.85	27,998,747.41	6.36%
7/31/2022	4,846,444.05	32,845,191.46	11.19%
8/31/2022	3,996,311.94	36,841,503.40	9.23%
9/30/2022	6,503,005.41	43,344,508.81	15.01%
10/31/2022	(8,886.16)	43,335,622.65	-0.02%
11/30/2022	(29,113.60)	43,306,509.05	-0.07%
12/31/2022	4,969.29	43,311,478.34	0.01%
Grand Total	43,311,478.34		100.00%



Objective 5

Create a Pivot Chart



Insert a Pivot Chart



If you don't see PivotTable Analyze tab, make sure you are clicked inside the Pivot Table



This Pivot Chart doesn't make much sense...lets change the values we are looking at.



TEKSOUTH

5 - Create Pivot Charts

Choose fields to add to report:	Drag fields between area below:	s
Search 🔎	▼ Filters	
AAI/ADSN		
Appropriation		
🗆 BA		
Commodity		
Cost Center/RCCC		
Dir Adv		
✓ Dir AEP		
Dir AEU		
🗹 Dir Avail Auth		
 Dir Commits 		
Dir GrComm	Axis (Categories)	
🗹 Dir GrObl	Period Date	•
Dir Sub Auth		
Dir Total Auth		
Dir UnComm Avail		
Dir UnComm Total		
Dir UnObl Avail		
Dir UnObl Total		
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Helper (TotalAuth, GrO		
Object Class		
🗌 Object Class Title		
Operating Entity		
PEC DEAMS		
PEC Legacy		
PEC Title		
Period Date		
Period Name	Σ Values	
Post Date	Sum of Dir GrObl2	•
SAG	Sum of Dir Avail Auth	•
Source	Sum of Dir Commits	•
Custom		

- Remove from the Pivot Table Values:
 - 'Sum of Dir GrObl' and 'Sum of Dir GrObl3'
- Add to the Pivot Table Values:
 - Dir Avail Auth, Dir Commits, Dir AEP

• Turn all values into <u>running totals</u>

			1	
	Values			
Period Date 💌	Sum of Dir GrObl2	Sum of Dir Avail Auth	Sum of Dir Commits	Sum of Dir AEP
10/31/2021	2,283,812.02	5,568,900.00	618,213.00	(2,478.67)
11/30/2021	3,850,822.70	6,536,900.00	1,209,920.00	573,759.11
12/31/2021	7,680,502.33	9,599,000.00	1,276,552.00	3,800,363.71
1/31/2022	10,924,102.53	15,099,000.00	1,295,578.00	7,169,282.10
2/28/2022	13,015,301.91	16,989,900.00	1,857,234.00	8,769,917.86
3/31/2022	16,190,630.85	19,357,800.00	2,589,792.00	11,786,451.95
4/30/2022	18,193,540.59	22,157,800.00	3,446,068.00	13,615,709.70
5/31/2022	25,242,254.56	33,061,100.00	2,515,420.00	16,171,522.96
6/30/2022	27,998,747.41	44,450,700.00	4,334,327.00	19,568,906.22
7/31/2022	32,845,191.46	46,141,500.00	3,081,453.00	22,287,052.73
8/31/2022	36,841,503.40	44,480,000.00	3,112,271.00	25,525,248.99
9/30/2022	43,344,508.81	43,355,130.00	14.00	29,755,440.50
10/31/2022	43,335,622.65	43,355,130.00	(22,363.00)	32,130,889.22
11/30/2022	43,306,509.05	43,355,130.00	(37,435.00)	33,003,608.11
12/31/2022	43,311,478.34	43,355,130.00	(37,435.00)	33,150,597.96
Grand Total				



- Change Chart Type to Combo Chart
 - Sum of Dir GrObl2 = Stacked Column
 - Sum of Dir Avail Auth = Line
 - Sum of Dir Commits = Stacked Column
 - Sum of Dir AEP = Area

Piv	votChart Anal	yze Desi	i gn Format
TT ct a	Change Chart Type	Move Chart	
	Туре	Location	



If you don't see PivotChart Design tab, make sure you have the Pivot Chart selected



Now we'll clean this Pivot Chart up





- Rename values
 - Remove the 2 from Sum of Dir GrObl2
 - Remove 'Sum of' from all of them

	Values						
Period Date 🔽	Sum of D	ir GrObl	Sum of	Dir Avail Auth	Sum of Di	ir Commits	Sum of Dir AEP
10/31/2021	2,28	3,812.02		5,568,900.00	6	518,213.00	(2,478.67)
11/30/2021	3,85	0,822.70		6,536,900.00	1,2	209,920.00	573,759.11
12/31/2021	7,68	0.502.33		9.599.000.00	1.2	276.552.00	3.800.363.71
1/31/2022	10,92	Find and I	Replace				? ×
2/28/2022	13,01						
3/31/2022	16,19	Fin <u>d</u>	Re <u>p</u> lace				
4/30/2022	18,19	Find what	- sum	Lof	\sim	No Format 9	et Format •
5/31/2022	25,24						
6/30/2022	27,99	R <u>e</u> place v	/ith:			No Format S	Set For <u>m</u> at ▼
7/31/2022	32,84	Within	Sheet	Mato	:h <u>c</u> ase		
8/31/2022	36,84	<u>.</u>			- h entire cell c	ontents	
9/30/2022	43,34	<u>S</u> earch:	By Rows	~			
10/31/2022	43,33	<u>L</u> ook in:	Formulas	~			Op <u>t</u> ions <<
11/30/2022	43,30			,			
12/31/2022	43,31	Replace		Replace	Find All	Find Next	t Close
Grand Total			i	_	-		



• Hide field buttons



If you don't see PivotChart Analyze tab, make sure you have the Pivot Chart selected



• Add a Chart Title: Daily Status of Funds





- Scale Axis to thousands
- Set Minimum Value to 0



Format Axis		\checkmark	×			
Axis Options V Text Options						
۵ 🗘 🖬		-				
✓ Axis Options						
Bounds						
Mi <u>n</u> imum	0.0	Reset	-			
Ma <u>x</u> imum	5.0E7	Auto				
Units						
Major	5.0E6	Auto				
M <u>i</u> nor	1.0E6	Auto				
Horizontal axis cross	es					
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O <u>M</u> aximum axis	value					
Display <u>u</u> nits	Thousar	nds 🔻				
✓ Show display units label on chart						
Logarithmic scale Base 10						
<u>V</u> alues in reverse order						
> Tick Marks						
> Labels						
> Number						



• Design the chart how you see fit



Design F

Format









Office 365 & 2019 allows you to insert a Pivot Chart directly – without needing to be tied to a Pivot Table

Import Data	?	\times			
Select how you want to view this data	in your w	/orkbook.			
Pivot <u>Chart</u> Only Create Connection					
Existing worksheet:					
=\$A\$7	1	Ŀ			
Add this data to the Data Model					
P <u>r</u> operties * OK	Ca	ancel			



Objective 6

Refresh Data



6 – Refresh Data







Questions

