

Using Excel to Report & Use Data



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Texas Juvenile Probation Commission

Data Coordinators Workshop

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Workshop Overview

- New Reporting Requirements
- Create Sneak-a-Peeks
- Use Excel functions to do the following:
 - Create a Master Workbook
 - Format Worksheets
 - Identify Duplicates Kids
 - Identify Grant-Funded Supervisions
 - Link Various Tables to a Master Worksheet

NEW REPORTING REQUIREMENTS

New Reporting Requirements

- Number of juveniles served
- Number of juveniles completing:
 - Program
 - Placement
 - Service
 - Supervisions
- One, two, & three year recidivism rates (TJPC will compute)
- For Grants C, U, X

Creating a....

SNEAK-A-PEEK

Create a Sneak-a-Peek

- Create a SAP for each Placement, Program, Supervision, or Service funded with Grants C, U, or X for each quarter
 - Call CASEWORKER help desk for SAP assistance with [reports](#) or use class examples.
 - Quarter Dates for FY09
 - 1Q09 – Sept 1, 2009 to Nov 30, 2009
 - 2Q09 – Dec 1, 2009 to Feb 28, 2010
 - 3Q09 – Mar 1, 2010 to May 31, 2010
 - 4Q09 – June 1, 2010 – Aug 31, 2010

**Follow same format for subsequent fiscal years.*
- Save SAP outputs with file extension **.CSV** (helps open file easily in Excel)

WORKING WITH EXCEL

Working with Excel

- Create a Master Workbook (Basic Excel)
- Format Worksheets (Basic Excel)
- Identify Duplicates Kids (Intermediate Excel)
- Identify Grant-Funded Supervisions (Intermediate/Advanced Excel)
- Link Various Tables to a Master Worksheet (Advanced Excel)

A **workbook** is the Excel file in which you enter & store related data. Each workbook can contain many worksheets.

A **worksheet** is a collection of cells on a single "sheet" where you actually keep and manipulate the data.

Helpful Hyperlinks & Tips

- ❑ This presentation contains hyperlinks or other tips for performing certain Excel functions.
- ❑ A hyperlink links a web page to another web page. When a user **clicks** on a [hyperlink](#), it takes them to a new web page.
 - Hyperlinks are identified by their different color and are usually underlined.
- ❑ I'll identify key words you can type in Excel's help feature to get more help or additional explanation.
- ❑ All 2009 presentations will be available on the [TJPC Web site](#).

Create a Master Workbook

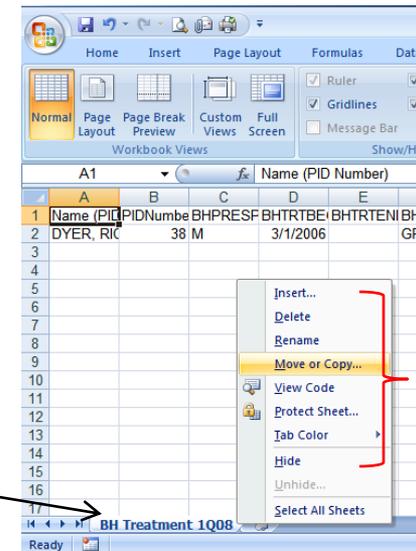
- Open all SAP.csv files & move/copy them all to the Supervision.csv file. Then, close all files except Supervision.csv

Excel Commands:

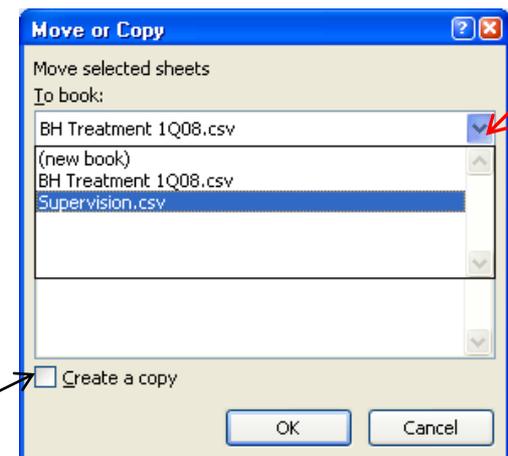
- Right-click on the bottom tab
- Select Move or Copy
- Move selected sheets to Supervision.csv

- Excel help key words: Move or copy a worksheet

Check here if you want to create a copy.



Notice you can do other things with this feature.



Create a Master Workbook (continued)

- Once all files have been moved to the Supervision.csv file, save it as an Excel file

Excel Commands:

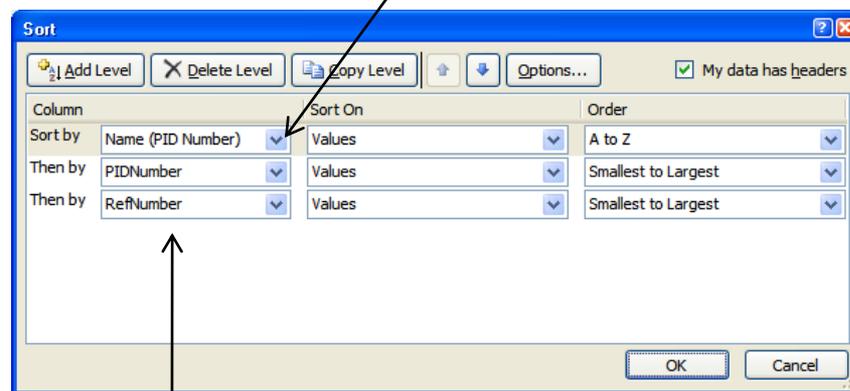
- Save As
- name the file Master 1Q08 (or whatever makes sense to you)
- Save as type = **.xls** or **.xlsx**
 - .xls is used for Excel 2003 or older versions
 - .xlsx is used for Excel 2007
- Delete all files with a .csv extension.

Formatting Worksheets

- Format Row 1: Bold, Bottom Border, resize columns
 - Read [Step by Step Tutorial](#) or watch a [video](#)

- Sort a worksheet by Child's Name, PID Number, Referral Number in ascending order. Place your cursor on cell A1.
 - Data
 - Sort
 - select Columns you want to sort by
 - Sort on Values
 - Order A to Z or smallest to largest
 - Click OK.

Select columns to sort by clicking here.



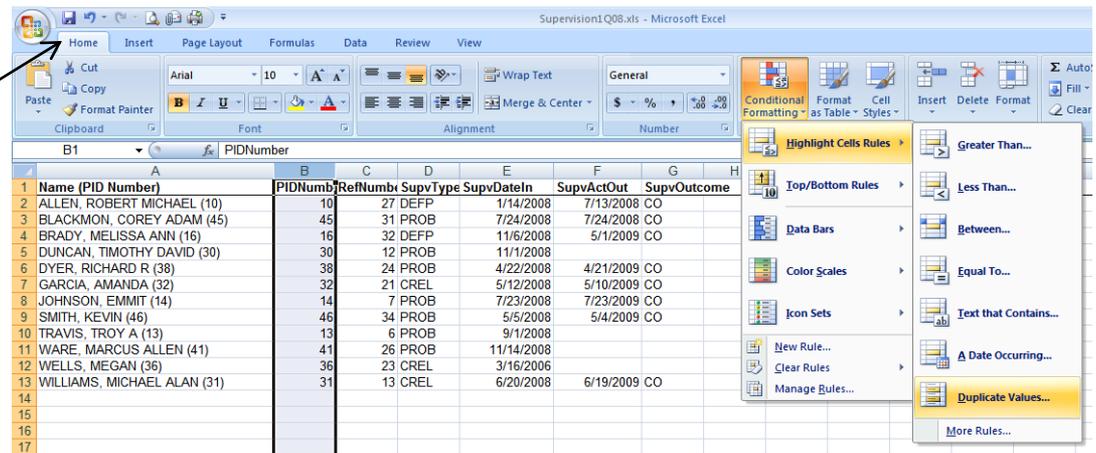
In this example, we are sorting first by Name, then by PID Number, then by Referral Number.

Identify Duplicate Names

Use Excel's Conditional Formatting feature to identify duplicates in the Supervision worksheet:

Excel Commands:

- Home tab
- Conditional Formatting
- Highlight Cells Rules
- Duplicate Values
- OK



- ✓ If child is currently under more than 1 supervision type, delete all supervision records except the one that is grant-funded.
- ✓ Use name of PO to help identify grant-funded supervisions.

Identify Grant-Funded Supervisions

- ❑ Create a copy of the Supervision worksheet and name it Grant Supervisions (see slide 10 for help on copying worksheets)

- ❑ Use a filter to identify POs who were hired with Grant C
The column named **SupvOfficer** has the name of the PO.
 - Go to Data
 - Filter
 - select SupvOfficer
 - click on (Select All)
 - click on the name of the officer who was hired with Grant C (in this example, it's JKER)

(continued)

Identify Grant-Funded Supervisions

- ❑ Name the column to the right of SupvOfficer “GrantC” and put an “X” in every juvenile’s record who is supervised by the grant-funded PO.
- ❑ Remove your filter. (Go to Date, Filter)
- ❑ Sort by column GrantC and then delete all records that don’t have an X.
- ❑ You now have a spreadsheet that identifies all juveniles supervised by the grant-funded officer

Link Tables to Master Worksheet:

Identifying a Master Worksheet

- Look at your spreadsheets. Which contains *all* the following information?
 - Personal ID number
 - Referral Number
 - Funding Source

- Which worksheet would you select as a master to provide missing information (from the bullets above) to other worksheets?

- How is Supervision 1Q08 different from the Grant Supervisions worksheet?

- Why would you NOT use the Non-Residential worksheet as your master?

(Continued)

Link Tables to Master Worksheet:

Identifying a Master Worksheet

- Select Supervision 1Q08 to be your Master Worksheet. You'll use it to provide missing information to other spreadsheets.
 - This will be your lookup table.
 - Ensure this table is sorted in ascending order by the child's name.
 - Rename the worksheet (bottom tab) if it helps you! I'll rename it "LookupTable."

- Use Excel function VLOOKUP to provide the referral number in the master worksheet to the following worksheets:
 - BH Referrals
 - BH Treatment
 - Drug Test

Link Tables to Master Worksheet: *VLOOKUP Overview*

- Go to the formula bar and click on *fx*
 - The formula bar is located above the work area of the spreadsheet.
 - The formula bar displays the data or formula stored in the active cell. The formula bar can be used to enter or edit a formula, a function, or data in a cell.

formula bar displays actual formula

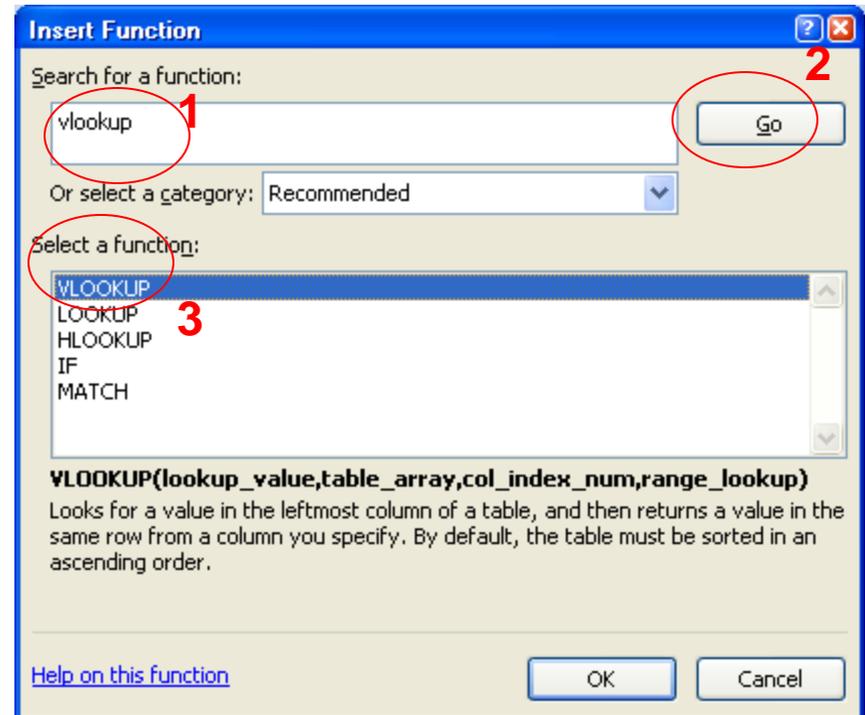
fx =C1*C2	
B	C
Cost of car	20000
Tax rate	0.07
Total Taxes	1400

active cell displays answer to formula

(Continued)

Link Tables to Master Worksheet: *VLOOKUP* Overview

- Clicking on *fx* opens a new window.
- 1. Under Search for a function, type vlookup.
- 2. Then click on Go.
- 3. Under Select a function, double-click on VLOOKUP



(Continued)

Link Tables to Master Worksheet: *VLOOKUP* Overview

Referral Number is in the 3rd column of this lookup table

Cell A2 contains the value that is looked up in the lookup table. It's a value that is in your current worksheet, and may or may not be in the lookup table.

Function Arguments

VLOOKUP

Lookup_value: A2

Table_array: LookupTable!\$A\$1:\$H\$13

Col_index_num: 3

Range_lookup: false

Looks for a value in the leftmost column of a table, and then returns a value in the same row from a column you specify. By default, the table must be sorted in an ascending order.

Lookup_value is the value to be found in the first column of the table, and can be a value, a reference, or a text string.

Formula result = 32

[Help on this function](#)

OK Cancel

	A	B	C	D	E	F	G	H
1	Name (PID Number)	PIDNumber	RefNumber	SupvType	SupvDateIn	SupvActOut	SupvOutcome	SupvOfficer
2	ALLEN, ROBERT MICHAEL (10)	10	27	DEFP	1/14/08	7/13/08	CO	NMED
3	BLACKMON, COREY ADAM (45)	45	31	PROB	7/24/08	7/24/08	FC	JJON
4	BRADY, MELISSA ANN (16)	16	32	DEFP	11/6/08	5/1/09	CO	JKER
5	DUNCAN, TIMOTHY DAVID (30)	30	12	PROB	11/1/08			JKER
6	DYER, RICHARD R (38)	38	24	PROB	4/22/08	4/21/09	CO	NMED
7	GARCIA, AMANDA (32)	32	21	CREL	5/12/08	5/10/09	TC	LMAR
8	JOHNSON, EMMIT (14)	14	7	PROB	7/23/08	7/23/09	TJ	JJON
9	SMITH, KEVIN (46)	46	34	PROB	5/5/08	5/4/09	CO	LMAR
10	TRAVIS, TROY A (13)	13	6	PROB	9/1/08			JKER
11	WARE, MARCUS ALLEN (41)	41	26	PROB	11/14/08	11/30/08	DC	JKER
12	WELLS, MEGAN (36)	36	23	CREL	3/16/06			LMAR
13	WILLIAMS, MICHAEL ALAN (31)	31	13	CREL	6/20/08	6/19/09	CO	TGRI

The dollar signs prevent Excel from changing the table reference when you copy the formula to other cells. Add \$ with F4.

Add Referral Number to BH Referrals Spreadsheet

- ❑ Go to the BH Referrals Spreadsheet. Place cursor on column J, row 1 to create a new column name. Name it ReferralNumber. Hit Enter to go to cell J2.
- ❑ Click on *fx* and search for the VLOOKUP function. Use the red arrow () to select the following:
 - Your lookup_value is the child's name. It's in A2.
 - Your Table_array is the lookup table.
 - ❑ After the table is selected, click on F4 to add the dollar signs. Ensure dollar signs are before and after every cell reference.
 - Col_index_number is 3 because Referral Number in the LookUp Table is in column 3.
 - Range_lookup - Type false to find an exact match.
- ❑ Use Copy-fill to copy the VLOOKUP formula to the other rows.
 - To use it, click and drag on the dot in the bottom right corner of the cell²¹ containing the formula.

(Continued)

Add Referral Number to BH Referrals Spreadsheet: The VLOOKUP Window

Brady, Melisa Ann is in the BH Referrals spreadsheet and you want to find her Referral Number from the lookup table.

If you get #N/A then either:
1) you may have an error in your formula, or
2) Melisa Ann Brady is not in the LookupTable .

Referral Number is in the 3rd column of this lookup table

Function Arguments

VLOOKUP

Lookup_value: A2

Table_array: LookupTable!\$A\$1:\$H\$13

Col_index_num: 3

Range_lookup: false

Looks for a value in the leftmost column of a table, and then returns a value in the same row from a column you specify. By default, the table must be sorted in an ascending order.

Lookup_value is the value to be found in the first column of the table, and can be a value, a reference, or a text string.

Formula result = 32

[Help on this function](#)

OK Cancel

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Trouble-shooting VLOOKUP

- Ensure the \$\$ are in the VLOOKUP table

- Why did we not find a Referral Number for Desiree Lopez?
 - What should you do when the lookup value is not found in the Lookup Table?

A few things about VLOOKUP

- ❑ The lookup value in the Lookup table must appear only once (duplicates not allowed)
 - In our case, the child's name must only appear once.
- ❑ Lookup values in the Lookup table must be sorted in ascending or alphabetical order.
- ❑ Remember to use \$ when referencing the table array.
- ❑ Use VLOOKUP to find the following information when it is missing from a spreadsheet:
 - Referral Number
 - Funding Source

Now you practice....

- Find the Referral Number that corresponds to the records in the following spreadsheets:
 - BH Treatment
 - Drug Test

- Find the Funding Source records in:
 - BH Treatment

Minimum Reporting Requirements

- At a minimum, departments need to provide the following:
 - Juvenile's name
 - PID
 - Referral Number associated with the service/program/placement
 - Funded service/program/placement/supervision
 - Funding source
 - Begin date
 - End date
 - Outcome

Thank you!

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