

State Purchasing Card Audit Guide



Maggie Clarke
Process Improvement Audit Supervisor
404-656-5907
Maggie.Clarke@doas.ga.gov

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EVALUATING THE PURCHASING CARD POLICY

OVERVIEW

The purpose of the policy evaluation is to determine if the policy provides adequate guidance to card program administrators, supervisors, cardholders, and other employees affected by the purchasing card (e.g. employees for whom cardholders make purchases).

The Policy Evaluation Checklist is an Excel spreadsheet that rates the policy as a high, medium, or low risk that the policy does not provide adequate guidance. The rating is based on the answers to questions about the policy. The answers can be "Yes", "Needs Improvement", or "No".

The evaluation checklist is available on-line at the State Purchasing Division (SPD) web site under *Process & Performance*. The address is:

http://doas.ga.gov/StateLocal/SPD/Process/Pages/Home.aspx



Click on the Excel icon to open the document. The version of the checklist on the web site will always be the most current version that the Process Improvement Team from the State Purchasing Division uses. However, Entities can modify the checklist to assign different ratings to individual questions and to the score that results in a particular risk rating. The number of possible points (all questions get a "Yes" answer) should always be 100. In the SPD version of the spreadsheet, some questions receive four points and others three for a "Yes" answer, depending on the importance SPD places on that aspect of the policy. You might want to place more or less emphasis on some questions, and that is acceptable. This tool is designed for you to evaluate your policy based on your organization's emphases.

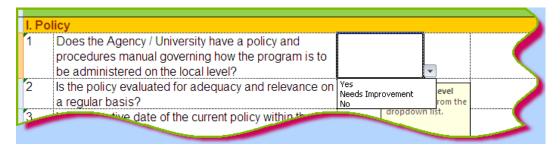
USING THE CHECKLIST

Go to the SPD web site and download the spreadsheet. It is recommended that you save a master copy of the spreadsheet if you make any customizations.



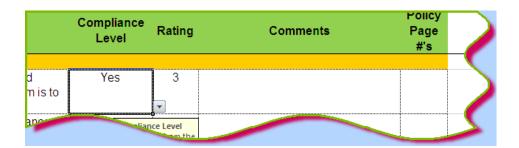
The blank spreadsheet will provide a place to enter your Entity's name. The score will display on the second line and will increase as more questions are answered either "Yes" or "Needs Improvement". Questions that are answered "No" will receive zero points and the score will not change.

Column C of the spreadsheet has a drop-down list from which you select the proper response to each question.



Column D contains a formula that evaluates the response in **Column C** and assigns a numerical value.

Column E provides a place to enter comments. **Column F** provides a place to enter the page number where the topic of the question is covered.



MODIFYING THE CHECKLIST

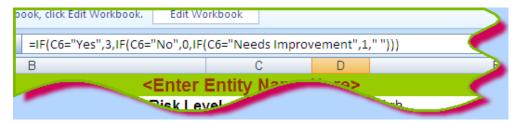
Advanced users of Excel who are familiar with the IF/Then statement concept can modify the checklist to change the grading and rating functions.

The following areas can be modified:

- The number of points for a "Yes" or "Needs Improvement" answer. A "No" answer should always receive zero points.
- The score needed to achieve a low, medium, or high-risk ranking.
- The score needed to achieve a grade of A, B, C, D, or F.

Modifying the Individual Question Point Values

The formula that assigns points is shown below:



It uses an Excel IF formula. In this example:

- If the answer is "Yes", the question receives three points
- If the answer is "No," the question receives zero points
- If the answer is "Needs Improvement", the question receives one point

To modify the formula, simply change the numbers. Remember, however, that the total score must equal 100 points. If you add a point to the "Yes" answer, then you need to either subtract one point from the score of "Needs Improvement" in the formula for that cell or subtract one point from another question's "Yes" or "Needs Improvement" formula.

Modifying the Overall Points Grade and Rating

The scores are maintained on the *risk levels for scores* tab to the right of the *Checklist* tab.

The illustration to the right shows that a policy that receives a score of 83 or above can be either an **A** or a **B** grade and will be a **Low** risk level, meaning that there is a low risk that the policy does not provide adequate guidance. A policy that receives 82 would be a **B** score with a **Medium** risk level.

There are similar cutoffs for *C*, *D*, and *F* scores and for *High* risk.



The **VLOOKUP** formula in cell **E2** evaluates the score in cell **D2** and assigns the risk level for that score from the **risk levels for scores** tab. A similar **VLOOKUP** formula in cell **F2** pulls the letter grade associated with the score from the **risk levels for scores** tab.





EVALUATING CARD PROGRAM TRAINING

OVERVIEW

The following checklist provides guidance to determine if an Entity conducts adequate training for (1) personnel involved in program administration, (2) personnel responsible for supervisory review of transactions, (3) cardholders, and (4) personnel responsible for conducting the self-audit (internal audit). If any answers to the questions on the second table below are "No" or "Needs Improvement", make comments as to what the deficiency is and how the area could be improved.

PROCUREMENT TRAINING INFORMATION

In the table below, indicate the training the following personnel have had as it relates to the purchasing card program based on the following key:

- I = Introduction to Purchasing Card Principles (yes/no in drop-down list)
- SA = How to Conduct a Self-Audit (P-card) (yes/no in drop-down list)
- Other = Indicate any other procurement training

Position	Name	How Long?	I	SA	Other
APO / UPO					
Program Administrator					
Program Coordinator					
Program Coordinator					
Program Coordinator					
Program Coordinator					
Program Coordinator					
Program Coordinator					

CARDHOLDER AND SUPERVISOR TRAINING CRITERIA

	Training Need	Yes / No / Needs Improvement
1.	Have any other Procurement personnel attended the Introduction to Purchasing Card Principles training? If so, attach an additional sheet showing names and titles.	
2.	Have any other Procurement personnel attended the How to Conduct a Self-Audit (P-card) training? If so, attach an additional sheet showing names and titles.	
3.	Have any cardholders attended the Introduction to Purchasing Card Principles training?	
4.	Have any cardholders' supervisors attended the Introduction to Purchasing Card Principles training?	
5.	Does management communicate changes in State or Entity policies and procedures to cardholders and supervisors? If so, how is this done?	
6.	Does the Entity require cardholders and supervisors to attend training prior to issuance of the card?	
7.	How is this training conducted (select one): • Group (class) • One-on-one • On-line tutorial • Other (explain)	
8.	Explain "Other" method of training:	
9.	Does the Entity offer refresher training at least annually?	

Training Need	Yes / No / Needs Improvement
10. Does management maintain records of who has attended training, including refresher training?	
11. Are the following areas covered in the training materials?	
Allowed purchases	
 Prohibited purchases 	
Spending limits, including STL and cycle	
 How to complete the transaction log or approved alternative 	
Tax-exemption certificates and procedures	
How to review monthly billing statement	
 Cardholder responsibilities, including formal cardholder agreement 	
12. What materials does management provide to cardholders and supervisors during training for them to keep as references? Check all that apply:	
State Purchasing Card Policy	
Agency/Institution Policy	
• Written procedures (describe):	
 Supply of Sales and Use Tax Exemption certificates Other (describe): 	
13. Does the Entity require cardholders to demonstrate an adequate knowledge of State and Entity policy prior to issuance of the card (e.g. written test)?	
14. Does the Entity require supervisors to demonstrate an adequate knowledge of State and Entity policy prior to providing supervisory review of transactions (e.g. written test)?	



EVALUATING SPENDING LIMITS

The goal in evaluating cardholder spending limits is to determine if the profile groups you have established provide the cardholders with the credit limits needed to do their job without exposing your Entity to unnecessary risk. (By assigning cardholders to profile groups, you can assign the same spending limits to multiple cardholders without manually setting the same limits for each cardholder individually.)

There are two required spending limits: (1) the Single Transaction Limit (STL) and (2) the cycle limit, also known as the "credit limit". State Purchasing Division (SPD) does not dictate the number of profiles an Entity can establish. Except for the Single Transaction Limit of less than \$5,000 (\$4,999.99 or less) and cycle limit \$25,000, SPD does not dictate the spending limits an Entity can impose on cardholders. Card Program Administrators also do not have to obtain any approvals from SPD to raise cardholder spending limits if the amount will still be within these limits. Bank of America also provides an optional limit. An Entity can also choose to limit the number of transactions a cardholder can make in one day.

PROFILE "BEST PRACTICES"

Limit the Number of Profiles

Basing profiles on job titles and actual spend levels permits an Entity to limit the number of profiles it must maintain. For example, an Entity can group job titles with similar spending habits into one profile. When an employee receives a purchasing card, the Card Program Administrator can assign the cardholder to the profile for the employee's job title. For individual cardholders whose spend does not fit the profile, or who have unusual situations, management can make exceptions to the rule that the cardholder must be in a specific profile.

Base Profiles on Job Titles

Develop profiles based on job titles. Generally, employees with the same or similar job titles will need the same spending limits. Assign a cycle limit that will accommodate the cardholder(s) in that group with the largest spend.

Calculate:

- The average cycle spend for a 12-month period as well as the largest cycle amount for each cardholder.
- The average cycle spend and largest cycle amount for the same period for all job titles. For example, determine the average spend for all Clerk II personnel, Procurement Officer I personnel, etc.

• Compare the average cycle spend and largest cycle spend for individual cardholders with the average spend by cardholders with the same job title.

Determine if the calculations look reasonable for the type of job each cardholder has. A large volume of spend on a non-procurement job title might indicate that the cardholder has job responsibilities not normally associated with the title. A small volume of spend on a procurement job title might indicate that the employee is not using the card to its full potential or that the employee fulfills non-procurement related job duties.

The chart below shows an example of a system of standard profiles plus a special-purpose profile, explained below.

Profile	Cycle Limit	Single Transaction	Daily # of Transactions	MCC Groups
1	\$1,000	\$300	5	1, 2
2	\$1,500	\$750	5	1, 2, 3
3	\$3,500	\$1,000	8	1, 2, 3
4	\$3,500	\$1,000	3	1,2
5	\$5,000	\$1,000	10	2, 3
6	\$10,000	\$2,500	15	1, 2, 3
7	\$10,000	\$2,500	10	2,3
8	\$25,000	\$5,000	No Limit	1, 2, 3
9	\$40,000	\$5,000	No Limit	1, 2, 3
Special 1	\$100,000	\$10,000	No Limit	1, 2, 3, 4

Merchant Category Code Groups (MCCG):

- GASTATE
- GASTATE1
- GASTATE2
- GAATHTRAV

As shown, management can structure the card profiles so that cardholders can make transactions only at merchants assigned to specific merchant category code groups. The

State of Georgia currently has four groups, three that are available to all cardholders and a travel group that can be used on a limited or temporary basis.

Assign job titles to a profile based on actual, historical spend information or potential spend for that type of job. For example, the Card Program Administrator could assign all procurement personnel to Profile #7 because they will need more flexibility than an Administrative Assistant who orders office supplies for one unit. The Card Program Administrator could assign the Administrative Assistant to a profile with more restrictions, such as Profile #2.

Management must address each case individually because there can be many reasons for spend not in keeping with a job title. Profile procedures should address what to do if an individual cardholder needs larger cycle or single transaction limits than those for the job title. A move up to the next profile might be in order.

Use Special Purpose Profiles

Each Entity will determine the number of standard profiles it needs based on job requirements and actual spend. Some agencies, such as GEMA, DNR, and DOT, could have emergencies or other special situations arise where cardholders need more flexibility in the types and amounts of purchases they can make. The Card Program Administrator can move cardholders from the standard profile to the emergency profile and then back to the standard profile when the emergency is over.

For example, certain agencies, such as GEMA and DOT, must respond to either natural or man-made disasters anywhere in the State. In these situations, cardholders might need more flexibility in how much they can spend and where they can use the cards. The DOT might send road crews from South Georgia to North Georgia to assist when there is a major winter event. Road crew foremen might need to pay for lodging and meals for the South Georgia crews. Once the emergency is over, the Card Program Administrator can move the cardholders back to the standard profile.

Data Analysis for Profile Evaluation

In order to perform a spend analysis on profiles, the Card Program Administrator needs the following information for at least 12 cycles. It is highly recommended that you evaluate your profiles annually for the first three years of your program and at least every 18 months thereafter.

You can use either Microsoft Excel or Microsoft Access to work with the data. Transaction data and profile information are available through Works Payment Manager.

- Cardholder name
- Cardholder job title (not in Works Payment Manager)
- Current spending limits
- Single Transaction (STL)
- Cycle
- # of transactions per day
- Individual transaction dollar amounts

• Individual transaction post date

The following list of analysis techniques can help you analyze your data to determine appropriate single transaction and cycle limits. Number of transactions per day is up to the discretion of management.

- Compare individual cardholder average cycle spend to the cycle spend for the profile.
 - If the cardholder consistently reaches the cycle limit and needs temporary increases, this might be justification for moving the cardholder to the next higher profile. It could also mean that the cardholder performs actual job responsibilities not in keeping with the job title.
 - If a cardholder consistently uses a lower percentage of the cycle limit, this might indicate that the limit is too high or that the cardholder is not using the card when possible.
- Calculate total spend by cardholder. Use the sort feature in Excel to sort these by job title and by amount. Evaluate the types of job titles found in each natural grouping.
 - Do job titles appear in more than one group?
 - Are all cardholders with the same or similar job titles found in the same natural group?
 - Sort the data by job title and then by total spend. Determine the maximum transaction amount and maximum cycle amount within each job title. These figures can provide insight into appropriate limits for the profile that will include that job title.
- Compare individual cardholder's maximum and average transaction amount and maximum and average cycle spend to the assigned profile.
 - Does the cardholder consistently reach the STL or cycle limit?
 - Does the cardholder consistently fall significantly short of the STL or cycle limit for the profile?
 - Determine the cardholder with the highest cycle spend within each job title. This figure might be an indication of a good cycle limit for the job title.
- Determine if cardholders within a job title have similar spending habits. If there is a cardholder who has significantly more spend than cardholders in the same job title, this cardholder might be a candidate for an exception to the standard profile. Other cardholders could remain in the lower spending limit profile.



PROCEDURE FOR SPENDING LIMITS ANALYSIS

The Spending Limits Analysis is designed to help you answer the question, "Could we reduce our risk of loss due to abuse while still providing our cardholders with the spending capacity they need in order to do their jobs?"

This chapters provides guidance on what to look for in a spending limits analysis as well as how to do this using basic Excel skills. For advanced Excel users, the chapter also explains how to create the analysis pivot tables from scratch as well as how to use a predesigned template available from the State Purchasing Division's Process Improvement Team.

It is highly recommended that you read these instructions through completely prior to beginning an analysis in order to ensure that you know where you are going with it.

Refer to the Chapter on *Evaluating Spending Limits* for suggestions for your analysis.

GETTING STARTED

Download the following fields to a comma-delimited text file from Works Payment Manager using a custom report.

- · Cardholder User Name
- Last Four Digits (of the card number)
- Amount
- Purchase Date
- Post Date
- Merchant/Vendor Name
- Merchant City
- Merchant State
- MCC
- MCC Description
- Card Profile Name
- Group Name (cardholder group name)
- Credit Limit

• Single Transaction Limit

Open the text file in Excel. Designate all fields except the following as <u>"text"</u> data type. By keeping the "General" data type, the amount will be a number (not currency, though) and the dates will display as dates.

- Amount
- Purchase Date
- Post Date

Load all transactions into a new Excel workbook. (NOTE: Illustrations in this document are from Excel 2007. If using 2003, the user will have to follow steps for that version to place the fields.)

BASIC EXCEL SKILLS

Basic Cycle Limit Evaluation

Once the transaction data has been downloaded into an Excel spreadsheet, sort the spreadsheet by cardholder name in either ascending or descending order and then by transaction amount in ascending or descending order.

Insert two rows between each cardholder section. Use the SUM function to determine the total spend for the cycle. Compare this to the cardholder's cycle limit.

Basic Single Transaction Limit Evaluation

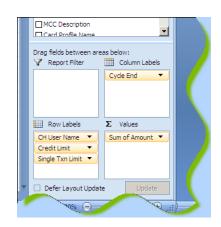
Once the transaction data has been downloaded into an Excel spreadsheet, sort the spreadsheet by cardholder name in either ascending or descending order and then by transaction amount in descending order. Scroll through the cardholders and compare the largest transaction amount to the Single Transaction Limit.

CYCLE LIMIT ANALYSIS WITH PIE CHART (ADVANCED EXCEL)

Construct first pivot table - Cycle Limit Analysis

Create a pivot table with the following configuration:

- Row Labels
 - Cardholder name
 - Card #
 - Cycle Limit
 - Status
- Column Labels Cycle Ending Date
- Values Sum of transaction amount



Calculated Columns

On the same line as the column headings (row four of the spreadsheet), label the six columns to the right of the data with the names shown in a-f below. Put the formulas below in each column on the first row beneath the column names (fifth row of the spreadsheet). Once all formulas are entered on the first row, copy them down for all rows:

- # of Positive Cycles This step will calculate the number of cycles during which a cardholder had net positive activity.
 - The formula for positive spend is: =COUNTIF(range, ">0"). "Range" is all of the cycle ending columns, excluding Grand Total, for the row. For example, if the cycle ending columns are column D through column O and the Grand Total is shown in column P, then the range for the first row will be D5:P5. The formula would read =COUNTIF(D5:P5, ">0").
- # of Negative Cycles This step will calculate the number of cycles during which the cardholder had a net credit (negative) amount:
 - The formula for negative spend is: =COUNTIF(range, "<0"). "Range" is all of the cycle ending columns, excluding Grand Total, for the row.
 - For example, if the cycle ending columns are column D through column O and the Grand Total is shown in column P, then the range for the first row will be D5:P5. The formula would read =COUNTIF(D5:P5, "<0").

of Active Cycles

- Add the number of negative and positive spend cycles to determine the total number of cycles during which the cardholder had activity.
- The formula for the total number of cycles is =Q5+R5, assuming that the number of positive and negative cycles are in columns R and S, respectively.
- Total Cycle Limit: Cycle Limit times # of active cycles.
 - The cardholder could have spent this amount for all cycles during which there was activity on the card. The formula is # of Active Cycles times the cardholder's credit limit.
 - For example, assume the cardholder's cycle limit is in cell B5, and the number of active cycles, created in step a.iii, is in cell, the S5 formula would read =B5*S5.

Average Cycle Spend

- Total Cycle Spend (Grand Total column) divided by # of Active Cycles (from #3 above)
- For example, if Total Cycle Limit is in cell T5 and the # of Active Cycles is in cell S5, the formula would read =T5/S5.

% of Cycle

• Format the column as percentage with two decimal places. This is average cycle spend as a percentage of a single cycle limit.

For example, assume the average cycle spend, created in the previous step, is in cell **U5** and the single cycle limit is in cell **C5**, the formula would read **=U5/C5**.

The formulas and results should look like this:

otal	# of Positive Cycles	# of Negative Cycles	# of Active Cycles		Total Cycle Limit	Avg Cycle Spend	% of Cycle	
	=COUNTIF(D5:P5, ">0")	=COUNTIF(D5:P5, "<0"	') =Q5+R5		=S5*B5	=P5/S5	=U5/B5	•
	=COUNTIF(D6:P6, ">0")	=COUNTIF(D6:P6, "<0"	') =Q6+R6		=S6*B6	=P6/S6	=U6/B6	
	=COUNTIF(D7:P7, ">0")	=COUNTIF(D7:P7, "<0"	') =Q7+R7		=S7*B7	=P7/S7	=U7/B7	
	=COUNTIF(D8:P8, ">0")	=COUNTIF(D8:P8, "<0"	') =Q8+R8		=S8*B8	=P8/S8	=U8/B8	
		COUNTIF(D9:P9, "<0"	') =Q9+R9			20/60	=U9/B9	
		- 040 !!	011				- 140/D40	
# (of Positive Cycles	# of Negative Cycles	# of Active Cycles	Т	Fotal Cycle Limit	Avg Cycle Spend	l % of Cycle	
# (of Positive Cycles	# of Negative Cycles		T 2 \$	-	Avg Cycle Spend		
3	of Positive Cycles	# of Negative Cycles 0 0		_	10,000.00	\$ 40.1	2 0.80%	•
3 9	of Positive Cycles 2 4 3	# of Negative Cycles 0 0 0	2	2 \$	5 10,000.00 5 8,000.00	\$ 40.1 \$ 314.1	2 0.80% 2 15.71%	
3 9 5	of Positive Cycles 2 4 3 5	# of Negative Cycles 0 0 0 0	2	2 \$	10,000.00 8 8,000.00 3,000.00	\$ 40.1 \$ 314.1 \$ 314.3	2 0.80% 2 15.71% 8 31.44%	
# · · · · · · · · · · · · · · · · · · ·	of Positive Cycles 2 4 3 5	0 0	2	2 \$ 4 \$ 3 \$	5 10,000.00 6 8,000.00 6 3,000.00 6 25,000.00	\$ 40.1 \$ 314.1 \$ 314.3 \$ 749.1	2 0.80% 2 15.71% 8 31.44% 3 14.98%	(
3 9 5 6	of Positive Cycles 2 4 3 5 3 2	0 0 0	3	2 \$ 4 \$ 3 \$ 5 \$	5 10,000.00 6 8,000.00 6 3,000.00 6 25,000.00 6 15,000.00	\$ 40.1 \$ 314.1 \$ 314.3 \$ 749.1	2 0.80% 2 15.71% 8 31.44% 3 14.98% 0 2.25%	
3 9 5	of Positive Cycles 2 4 3 5 3 2 9	0 0 0 0	3	2 \$ 4 \$ 3 \$ 5 \$ 3 \$	5 10,000.00 6 8,000.00 6 3,000.00 6 25,000.00 6 15,000.00 6 10,000.00	\$ 40.1 \$ 314.1 \$ 314.3 \$ 749.1 \$ 112.3	2 0.80% 2 15.71% 8 31.44% 3 14.98% 0 2.25% 8 0.31%	(

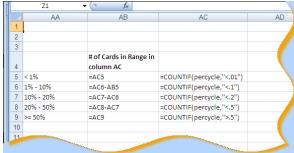
Preparing a Pie Chart

If desired, you can create a chart or graph to illustrate Cycle Limit and Single Transaction Limit (discussed below) utilization.

- Name the column range for the <u>% of Cycle</u> as percycle.
- Hi-lite the entire column and enter percycle in the cell address field in the top left-hand corner as shown in the diagram to the right.
 - Enter the text and formulas in any three columns to the right. Column letters and row numbers are shown for illustration purposes only. You columns and rows might be different and you will need to use your column letters and row numbers instead of these if they are different. Note that:

• The numbers shown in the formulas in Column AC have decimal points. They must be put in exactly as shown.

 The greater than/less than symbols and the number must be enclosed in quotation marks.

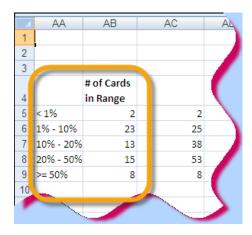


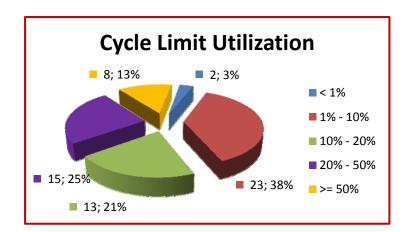
percycle

Function Libra

The results will appear as shown in the diagram to the right.

Create the graph or chart using the data shown in the orange box to show the number of cards in each range and the percentage of the total number of cards for each range. See next page for a three-dimensional pie chart example.





Analysis Thoughts

There are no industry benchmarks, so it is up to management to determine the level of risk that they are comfortable with. As you can see from this illustration, only 13% of cardholders had an average cycle spend of more than 50% of their cycle limit. The largest percentage of cardholders averaged between 1% and 10% of their cycle. From these figures, it appears that cycle limits for this Entity's cardholders are set higher than what they need. Cardholders who consistently use a high percentage of their cycle limit are probably set at realistic levels. Those who consistently use less than 50% of their cycle limit could be set too high for their needs. However, if these cardholders are also buyers who create purchase orders, they could be encouraged to use the purchasing card in lieu of purchase orders in order to increase efficiency.

Alternate Cycle Limit Review

The Cycle Limit should also be able to handle the largest per cycle spend for each cardholder. To determine if cardholders are using the purchasing card to the greatest extent needed, instead of the number of cycles with activity (a-c above), enter the formula **=MAX(range)** in the column next to the Grand Total. "Range" is all of the cycle ending columns, excluding Grand Total, for the row. The columns will show the amount of spend in each cycle. The Grand Total column will show the largest cycle amount for the time period for the cardholder.

Once again, there are no industry benchmarks. However, doing this analysis, paying special attention to cardholders who also create purchase orders, will identify areas where cardholders have the capacity to transfer purchase order spend to the purchasing card in order to increase purchasing efficiency. Refer to the self-audit tool *Evaluating Vendor Spend* for suggestions on incorporating purchase order spend and purchasing card spend into one analysis.

SINGLE TRANSACTION LIMIT (STL) ANALYSIS WITH PIE CHART (ADVANCED EXCEL)

The Single Transaction Limit Analysis should be done using two different calculations on the transaction amount field. The instructions below use the "average transaction amount" to compare to Single Transaction Limits. However, since the STL also needs to accommodate the highest transaction amount in a given time period, the analysis should be done using the highest transaction amount.

Construct second pivot table - Single Transaction Limit Analysis

- Row Labels
 - Cardholder name
 - Card #
 - Single Transaction Limit
- Column Labels None
- Values Largest (Max) of transaction amount. This will display the largest transaction amount

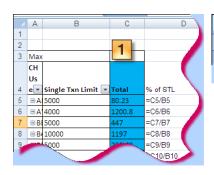
Calculate the average transaction amount as a percent of the Single Transaction Limit. See illustration below.

On row four of the spreadsheet with the pivot table, label the column to the right of the Grand Total as $\frac{\% \ of \ STL}{}$.

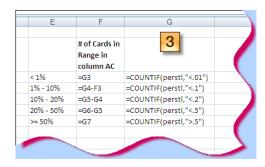
- 1. Format the column as percentage with two decimal places.
 - Enter a formula on the next row in the same column as the largest transaction amount divided by the Single Transaction Limit. For example, if the average transaction amount created in the previous step is in cell C5 and the STL is in cell B5, the formula would read =C5/B5.
- 2. Name the column range with the percentages as perstl.
- 3. Enter the following text and formulas in any three columns to the right of the <u>%</u> of STL column. Column letters and row numbers are shown for illustration

purposes only. Your columns and rows might be different and you will need to use your column letters and row numbers instead of these if they are different. Note that:

- The numbers shown in the formula have decimal points. They must be put in exactly as shown.
- The greater than/less than symbols and the number must be enclosed in quotation marks as shown.







Spending Limits Analysis Using the Template (Basic /Intermediate Excel)

If you want review individual cardholders quickly, or if you are not comfortable with Excel pivot tables, the Process Improvement team has developed an Excel template to calculate Total Spend and Average Transaction Amount to compare to Cycle Limit and Single Transaction Limit, respectively. You will need the following data elements (in the order on the spreadsheet) from Works Payment Manager.

- Program Card Name (This column is not essential. However, the template has a column for it. If you do not download, or enter, your card program name, then you will need to delete column B from the *Data* tab.)
- Cardholder's Group Name
- Cardholder name
- Last four digits of the card number
- Transaction amount
- Purchase date
- Post date
- Merchant name
- Supplier city
- Supplier state
- MCC
- MCC description
- Card Profile Name

- Credit (cycle) Limit
- Single Transaction Limit

The <u>Read Me</u> tab of the workbook contains instructions on how/where to enter the data and how to refresh the pivot table.

The columns on the <u>Data</u> tab of the workbook are named according to the above list of data elements on the second row of the spreadsheet.

- The first row of the spreadsheet has a drop-down list in cell A1 for you to select the day of the month on which your cycle ends (4 or 15 or 27). These are the only values that the cell will accept.
- There is also a note instructing you not to delete rows one or two.
- Note that in cell A3, there is already a date value of 01-15-1900. This field has a formula that you will copy to all data rows during the analysis. Do not delete this formula. However, if you do accidentally delete it, here it is:

=(IF(DAY(H3)<=\$A\$1, MONTH(H3),IF(MONTH(H3)=12,1,MONTH(H3)+1)) &"-"& \$A\$1

The <u>Pivot Table</u> tab of the workbook has the pivot table that you will use to review cardholder actual spend and spending limits. Once the data is copied onto the <u>Data</u> tab, you will "refresh" the pivot table. In Excel 2003, select Data—Refresh Data from the menu bar. In Excel 2007, click on the <u>Data</u> tab and click **Refresh All**.

The pivot table will do more than one calculation on the transaction amount only if there are three or fewer row fields. If you are not interested in the card number for your analysis, you can leave it off the pivot table. If you leave it off, you can display both the Cycle Limit and the Single Transaction Limit at the same time. However, if you want to see it for the either analysis, you will need to have just the Cycle Limit field as a row or just the STL field as a row.

To load the transaction data into the spreadsheet:

- Open the Works Payment Manager download file as described above
- Click anywhere in the download spreadsheet
- Click CTRL-A to highlight all data
- Click CTRL-C to copy all data to the Windows clipboard
- Click on Cell B3 on the Data spreadsheet
- Click CTRL-V to paste the data into the Data tab spreadsheet



EVALUATING VENDOR SPEND LEVELS

State purchasing regulations as found in the Official Code of Georgia, Annotated, require competitive bids for any purchases anticipated to be \$5,000 or more. The \$5,000 competitive bid requirement is based on "purchase(s)" and is interpreted as the total of a single purchase, either purchase order or purchasing card transaction or combination of both. A "single purchase" is defined as any purchase of like or similar items where the need is foreseeable or known at the time of the purchase. Using the purchasing card as a method of payment does not relieve the State Entity, or cardholders, from following competitive bidding procedures when foreseeable and/or known purchases are determined to be \$5,000 or more. Refer to the Georgia Procurement Manual for additional information.

The APO/CUPO is responsible for including purchasing card transactions in the quarterly spend evaluation required by the Georgia Procurement Manual. This exercise explained below allows the user to:

- Quickly identify vendors with more than \$5,000 in transactions for any one day, regardless of the number of cardholders, in order to determine if cardholders are splitting purchases to circumvent bid requirements.
- Assist in the quarterly vendor spend analysis to identify areas where State Entity contracts could result in cost savings.

COMPILING TRANSACTION DATA

Works Payment Manager allows the user to download transaction information into an Excel spreadsheet. However, if the user expects that there will be more than 65,535 rows, the transactions must be downloaded to a text file and then opened with Excel.

The following data fields should be exported using a custom report. If analyzing for the same time period as the Spending Limits Analysis, you can use that export and/or the spreadsheet used for that analysis. It is recommended that you use at least three cycles (one quarter) of spend for the vendor spend analysis.

- Cardholder user name
- · Post (Bank) Date
- Purchase Date
- Merchant Name
- Merchant City
- Transaction Amount

- Transaction MCC
- MCC Description

Copy the appropriate data to the corresponding columns on the "Spending Limits Analysis Template.xls" used for the cardholder spending limits analysis.

Use this spreadsheet because you will need it to calculate the cycle ending date. There is a column with a built-in formula for calculating the cycle end date based on the bank posting date and when your Entity's cycle ends.

There is a "Read Me" tab on the spreadsheet with general instructions.

BASIC EXCEL SKILLS

Once the transaction data is downloaded from Works Payment Manager into an Excel spreadsheet, sort the spreadsheet by vendor name and transaction date. Review each vendor individually to determine if:

- Any single transaction or combination of transactions in a single day exceeded \$5,000. This could indicate split transactions.
- Insert two rows beneath each vendor name in order to facilitate calculating total spend for the time period.
 - Use the SUM function in the transaction amount column to determine what was spent by all cardholders with each vendor during the period.
 - Ask: Would a State Entity contract be beneficial? Does another State Entity have a contract for these goods or services that we could piggyback from?
- Pull purchase order information from the financial system (see below) and include these amounts for those vendors where there is both purchasing card and purchase order spend.

For advanced Excel users, see the following pages on use of a pivot table to facilitate the review.

CYCLE SPEND ANALYSIS - PIVOT TABLE (ADVANCED EXCEL)

Use of a pivot table will make analyzing vendor spend much quicker since you will be able to display a list of vendor names and the total spend for each one without having to insert rows and use the SUM function. Refer to the Appendices for pivot tables in Excel 2003 and Excel 2007 for step-by-step instructions on creating a pivot table.

Once data has been copied to the template, ensure that the Data Source for the pivot table includes all rows on the Data tab.

Configure the pivot table to have the following layout

- Row Vendor name
- Column Cycle ending date
- Data Sum of transaction amount

Analysis

- Review the pivot table for vendors with unusual trends in dollar amounts.
- Review the merchant names for suspicious merchants.
- Double-click on the dollar amount to copy these transactions to a new spreadsheet. Rename the spreadsheet to the vendor name.
- Obtain and review the documentation for the transactions.

Split Transactions Analysis

Once data has been copied to the template, ensure that the Data Source for the pivot table includes all rows on the Data tab.

Configure the pivot table to have the following layout

- Row Vendor name
- Column Purchase Date
- Data Sum of transaction amount

Analysis

On the pivot table, replace the Cycle End column with the Purchase Date.

If any vendors have more than \$5,000 in a single day, determine if these transactions were:

- From a contract, either SWC or State Entity or
- The result of a competitive bid process.
- If there are any single transactions >= \$5,000 at a non-contract vendor, determine if these purchases were bid.
- Obtain and review the documentation to determine the circumstances.
- Ensure that appropriate documentation is retained if it was an emergency purchase and that the Emergency Authorization was sent to the State Purchasing Division.

FINANCIAL SYSTEM PURCHASES (BASIC EXCEL)

Run the financial system query that will provide the data shown below to Excel. Name the spreadsheet Vendor PO Analysis. See analysis steps below.

Run the PeopleSoft query 0PO019D_PO_LIST_BY_BU_DETAIL (State Accounting Office PeopleSoft users) or equivalent query in non-SAO PeopleSoft or non-PeopleSoft financial systems that shows the following information. Items in red font are required, the other items are the ones that come in the standard 19D query. You can delete those columns once you download the query to Excel, if desired.

- Unit (Agency code)
- Origin
- PO Number
- Change Order
- PO Date
- Type
- PO Reference
- Status
- Budget Status
- Vendor (this field is the 10-digit vendor ID)
- Name (vendor name)
- Vendor Classification
- Payment Terms
- Buyer-Phone
- Line #
- 5 Digit NIGP
- 10 Digit NIGP
- Description
- Line Amount
- Build a pivot table with the following layout:
- Rows
- Name (vendor name)
- Buyer-Phone
- Data Sum of Line Amount (format as currency)

Analysis

• Using the filter box on the Buyer-Phone field, select all of the buyers who are also cardholders.

- Review for vendors that also accept the P-card.
- Focus on vendors shown on the listing of Statewide Contracts and Agency contracts.
 - Make a list of the purchase orders:
 - Buyer name
 - Vendor name
 - PO number
 - PO date
 - Total dollar amount
- Determine if P-card spending limits, both Single Transaction and Cycle Limit, for the buyers could have accommodated using the P-card instead of a purchase order for the purchases.
- Determine if other non-cardholder buyers are using vendors that accept the purchasing card.
- Evaluate to determine if it would be beneficial to issue purchasing cards to these buyers.
- Encourage buyers with cards to use the card instead of a purchase order for all vendors that accept cards.



P-CARD COMPLIANCE ANALYSIS WORKBOOK (ADVANCED EXCEL)

OVERVIEW

The State of Georgia Purchasing Card (P-Card) is a procurement tool in the same way that a purchase order is a procurement tool. All legal requirements for procurement in the State of Georgia, as found in the Official Code of Georgia, Annotated (O.C.G.A.) and the Georgia Procurement Manual (GPM), govern use of the P-Card. Training provided to cardholders and supervisors or approving officials prior to receiving cards or supervising a cardholder must include guidance on these laws and administrative rules. Card Program Administrators, Auditors, and other third-party reviewers must include compliance with these laws and administrative rules in their audit processes. If cardholders are not abiding by the requirements, then additional training and/or corrective action will be necessary.

P-Card industry best practices state that it is not necessary to audit every transaction. This should be done at the supervisory level. The auditor's role is to evaluate the controls in place and to review an adequate sample of transactions to determine with reasonable certainty that controls are working and that the card is being used according to State and internal policy requirements. A review method known as "continuous monitoring" is also becoming widely recommended and practiced.

Continuous Monitoring allows you to identify transactions where cardholders are not abiding by either State regulations or your own internal policies and procedures. In Microsoft Excel, "VLOOKUP" formulas can look at specific fields in a transaction to determine if they comply with a set of pre-established business rules for that particular data element, such as the vendor name or the Merchant Category Code (MCC). Those that pass the test can be eliminated from a high-level review. Those transactions that do not pass are the ones that you can focus your attention on to determine if your State Entity is at risk for financial loss due to such things as failure to bid large purchases or failure to use established contracts.

The P-Card Compliance Analysis Workbook is an Excel workbook designed to help the Card Program Administrator or auditor monitor P-Card transactions without actually looking at each one. The workbook can be used with transaction data over any period of time, even on a weekly basis if resources permit. Use of this workbook is optional.

The P-Card Compliance Analysis Workbook uses formulas in one cell to compare the values in another cell on the row to a list of a values. It provides a "Yes" or a "No" response to indicate that the value in the cell matches or does not match the criteria. This can eliminate transactions that, for any number of reasons, do not need to be

included in a high-level audit. (This is not to say that these transactions should never be reviewed, though. When doing an audit, a sample should be chosen from the total population in order to get an adequate picture.) The criteria used in this workbook are based on the Georgia Procurement Manual and the State P-Card Policy. The workbook can be customized to incorporate unique State Entity business rules, as well.

This workbook makes extensive use of lookup formulas, pivot tables, and filters. Users should have intermediate to advanced skills in Excel or access to helpful resources, such as reference books and other users. If the user needs help in this area, the Process Improvement Team has also provided a brief overview on how to use pivot tables on the State Purchasing Division web site.

DOWNLOADING TRANSACTIONS FROM WORKS PAYMENT MANAGER

The workbook is a template with pre-established columns based on a specific Works Payment Manager download file layout. The data can be downloaded from Works either to an Excel file or to a text file. However, the download for this workbook must be a text file because some fields that the workbook needs as "text" come out of Works in a numeric format. Numeric fields will not work with the VLOOKUP formulas on the spreadsheet.

If you download the transactions to a text file, you can specify that the Merchant Category Code can be a text field instead of a numeric field when you open the file. There are two reasons for this:

- There are some MCC's that have leading zeroes. If opened directly in Excel, Excel will
 assume that the field should be numeric. The leading zeroes will be removed. The
 MCC "0742", for example, would display in Excel as "742".
- The MCC field is used in VLOOKUP formulas. The formula will only work if the field is a text field. It will not work with numeric fields.

You can download the transactions for any time period. However, it is recommended that you download based on your cycle end date. For example, if your cycle ends on the 15th of the month, you would want to download from the 14th of one month to the 15th of the next month. This will enable you to more accurately determine if cardholder cycle limit levels are set appropriately for the cardholders' needs.

It is recommended that you configure and "bookmark" a report in Works Payment Manager so that the report does not have to be re-created each time. Open either the Billing Statement or the Spend by MCC report to get started. Add, delete, and rearrange fields as needed. For assistance with configuring a report in Works Payment Manager, click on the Tools link on the left-hand side menu and select Training. Navigate to the Quick Reference Guide entitled "Creating Configurable Reports". Refer to the chapter *Configurable Reports in Works Payment Manager* for additional information.

File Layout

The workbook uses the following data fields. The fields in red font are required. If any of the others are not downloaded from Works, the user must remove those columns from the spreadsheet prior to using. If you add any fields from Works Payment

Manager, then a corresponding column must be inserted into the appropriate place on the *Data* tab of the workbook. The corresponding column letters are shown next to the field name in the list below.

The layout in Works Payment Manager is shown below and in the screen shots to the right. Refer to the section in this document entitled *Configurable Reports in Works Payment Manager* for more details on how to run configurable reports.

- CH User Name
- Last 4 Digits
- Amount
- Purchase Date
- Post Date
- Comp Supp Name
- Comp Supp Street 1
- Comp Supp City
- Comp Supp State
- Comp Supp Zip
- Comp Supp Phone
- MCC
- MCC Description
- Grp Group Name
- Single Txn Limit
- Credit Limit

Included columns:

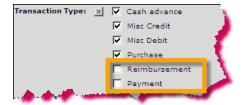
CH User Name
Last 4 Digits
Amount
Purchase Date
Post Date
Comp Supp Name
Comp Supp Street 1
Edit

Edit

Edit

Vendor Name

Under "Transaction Type", ensure that "Reimbursement" and "Payment" are not checked.



Exporting to Excel

If you know that you have fewer than 65,535 rows, then you can export the transactions from Works directly into Excel. You can then skip to the section entitled "Copy Transaction Data to the P-Card Compliance Workbook" below.

Exporting to a Text File

If you know that you will have more than 65,535 rows, then you will need to export the data to a text file and then open with Excel. Excel 2003, though, will only handle 65,535 rows. Excel 2007 can handle more.

The Works download file is a comma-

delimited text file. This means that the file uses a comma to separate the data fields (columns). To open the text file, open Excel. Select Open from the menu.

- 1. Navigate to the folder where your data file is.
- 2. Select **Text Files** in the **Files of type** drop-down list. Note that Excel file type is the default. You must change the file type in order to see your data file.
- 3. Click on the file name.
- 4. Click Open.

The Import Text Wizard dialog box will walk you through opening the file.

Step 1 of 3:

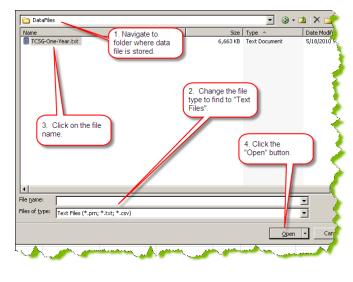
Click on the **Delimited** radio button and then **Next.**

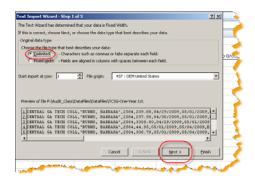
Step 2 of 3:

Specify that the mark used to define the fields is the *Comma*. You can leave the *Tab* box checked as well.

Click the Next button.

Step 3 of 3:



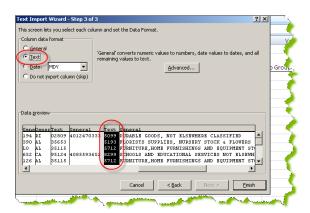




Use the scroll bar to review the fields. Notice that the wizard gives a preview of what the data will look like.

The default data format is "General", which means that Excel will import text as text, numbers, as numbers, and dates as dates. The rule of thumb for non-date fields is, if you are not going to do calculations on the field or the field is not a date, then you should specify "Text" as the field type.

 In the Works file, there are some fields that contain numbers (last four digits of the card and the Merchant Category Code) that you will want to specify as text fields. There are also other



fields, such as the merchant phone number, zip code, or address that will sometimes have just numbers instead of alpha characters. Designate these fields as text. To do this, click on the field and then click on the *Text* radio button.

- Import the Transaction Date and Post Date columns as "Date".
- Import the Transaction Amount, STL, and Credit Limit columns as General.

Notice that you can "skip" a field if desired. However, since your download was designed specifically for this workbook, you will not want to skip any fields. If you do skip any fields, be sure to delete the corresponding column from the *Data* tab spreadsheet.

Click *Finish* to complete the import process after you have assigned data formats to all fields.

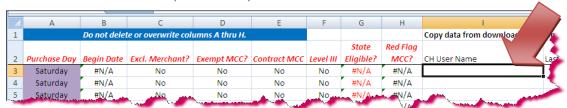
You data will display in Excel. Keep the file open. It will be referred to as the "data download spreadsheet" from now on. It is recommended that you save this file so that you do not have to run the report again if you have to start over.

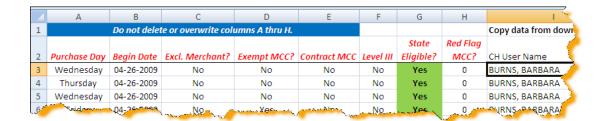
Copy Transaction Data to the P-Card Compliance Workbook

In the next few steps, you will copy the transaction from the data download spreadsheet to the template on the *Data* tab in the P-Card Compliance Analysis Workbook. It is recommended that you read through these steps prior to actually performing them in order to have an understanding of what you will do.

Open the P-Card Compliance Analysis Workbook and click on cell I3 on the Data tab.
 This will be the first blank row in the CH User Name column. See the screen shot below. [NOTE: The screen shots in this document will be of the workbook using Excel 2007. If you have Excel 2003, your screens will look slightly different. The wording of instructions uses Excel 2007 terminology. You will need to perform the same tasks according to Excel 2003 steps. All cell references will be the same for both versions of Excel.]

- Open the data download spreadsheet if not already open.
 - Delete the first row with the column headings. If you do not delete it, you can delete it once you copy the data to the workbook.
 - If you downloaded reimbursements and payments to the bank with your transactions, delete these rows as well.
- Click anywhere in the data download spreadsheet.
- Click CTRL-A to highlight all of the transaction data. [NOTE: Do not simply highlight the entire spreadsheet. If you do, the data will not fit on the P-Card Compliance Analysis Workbook's Data tab when you try to paste it into cell 13.]
- Click CTRL-C (or use any other copying method that you are familiar with) to copy the highlighted area to the Windows clipboard.
- Navigate to the P-Card Compliance Analysis Workbook and click on cell I3. (See diagrams below.)
- Click CTRL-V (or use any other paste method that you are familiar with) to paste the data into the P-Card Compliance Analysis Workbook.





When the data is pasted into the spreadsheet, the formulas in columns **A** through **H** will calculate. To verify that all rows of data are complete, click on cell **I3** and then click **End** and the **Down Arrow** key to go to the last row of data. Ensure that the formulas are on each row of data. If not, go up to the last row that has the formulas and copy columns **A** through **H** down to all data rows.

If there are rows with formulas but no transactions, those rows can be deleted.



For more information on the formulas and the lookup tables, see *Maintaining the Lookups Tab* below.

Getting to Know the Data Tab

The Data tab contains more than just your transaction data. Formulas in Columns **A** through **H** display information based on the values shown in the columns of the spreadsheet.

- Purchase Day This is the day of the week that the purchase was made on based on the Purchase Date column. It uses this formula:
 - =LOOKUP(WEEKDAY(L3),{1,2,3,4,5,6,7},{"Sunday","Monday","Tuesday","We dnesday","Thursday","Friday","Saturday"})
- Begin Date This is the Monday of the week during which the transaction took place.
 It uses this formula: =VLOOKUP(WEEKNUM(L3),weeks,2,FALSE). The VLOOKUP
 formula looks at the week numbers shown in the "weeks" range on the Lookups tab.
 This table needs to be updated annually as explained below.
- Excl. Merchant? "Excluded Merchants" are those merchants that have already been identified as Statewide Contract or State Entity contract merchants. The formula in this cell looks at the "excluded" range on the Lookups tab. If it finds the merchant name, it puts a "Yes" in the cell; if not, it puts a "No". When/if you find a contract vendor that has not been excluded, simply copy the vendor name to the last row of this range. The formula on the data tab will automatically change. The same field on the pivot table will update when you refresh the pivot table. It uses this formula:
 - =IF(ISNA(VLOOKUP(N3,excluded,2,FALSE))=TRUE,"No",VLOOKUP(N3,excluded,2,FALSE))
- Exempt MCC?1 "Exempt MCCs" are those MCCs that are probably equivalent to one of the exempt NIGP codes listed on the State Purchasing Division web site. The formula in this cell looks at the "exempt" range on the Lookups tab. If it finds the MCC, it puts a "Yes" in the cell; if not, it puts a "No". It uses this formula:
 - =IF(ISNA(VLOOKUP2(T3,exempt,2,FALSE))=TRUE,"No","Yes")
- Contract MCC "Contract MCCs" are MCCs that are associated with known Statewide Contract merchants. The formula in this cell looks at the "contract" range on the Lookups tab. If it finds the MCC, it puts a "Yes" in the cell; if not, it puts a "No". It uses this formula:
 - =IF(ISNA(VLOOKUP(T3,contract,2,FALSE))=TRUE,"No",VLOOKUP(T3,contract, 1,FALSE))
- Level III "Level III" refers to a list of merchants that are known to transmit Level III detail information. As more are identified, the user can copy these names to the

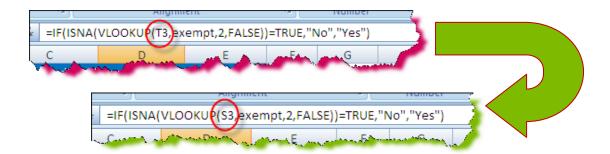
¹ A NOTE ABOUT MERCHANT CATEGORY CODES: If you exported transactions from Works Payment Manager to an Excel spreadsheet, then Excel assumed that the MCC will be used as a number. As a result, it removes the leading zero in the four codes that begin with zero (0701, 0742, 0763, and 0780). You will need to go back and designate the column as text and then manually add the zero to the beginning of those codes in any transactions where they occur.

² A NOTE ABOUT THE "VLOOKUP" FUNCTION: This function will only work if it is looking up a value in a cell formatted as "text".

"level3" range on the Lookups tab. The formula in this cell looks at the "level3" range on the Lookups tab. The formula on the data tab will automatically change. The same field on the pivot table will update when you refresh the pivot table. If the formula finds the merchant name, it puts a "Yes" in the cell; if not, it puts a "No". It uses this formula:

- =IF(ISNA(VLOOKUP(N3,level3,2,FALSE))=TRUE,"No","Yes")
- State Eligible? State Eligible" MCCs are those that are in one of the four State-authorized groups. These groups are (1) GASTATE, (2) GASTATE1, (3) GASTATE2, and (4) GAATHTRAV. The formula in this cell looks at the "mccs" range on the Lookups tab. It then pulls either "Yes" or "No" based on what is in the third column of that range. This column corresponds to the old MCC Analysis workbook. It uses the formula:
 - =VLOOKUP(T3,mccs,3)
- Red Flag MCC? The formula in this cell looks at the "mccs" range on the Lookups tab. It then pulls the value in the eighth column of that range. There might be MCCs that are legitimate, authorized MCCs but that, for any number of reasons, the user might want to review transactions at these merchants. To customize this function, go to column X of the Lookups tab. Enter "Yes" on the row for that MCC. This column uses the formula:
 - =IF(VLOOKUP(T3,mccs,8,FALSE)="Yes","Yes","No")

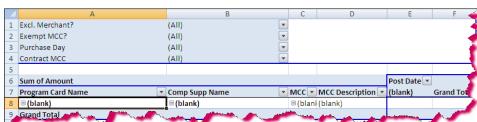
The remainder of the columns contains the transaction data downloaded from Works Payment Manager. If you decide not to download one or more of those fields, be sure to delete those columns from the spreadsheet. The formulas above look at specific columns. The formulas will automatically adjust to reference the new column. For example, if you delete column S (the merchant's phone number), then the MCC, currently in column T, will be in column S. The VLOOKUP formulas will then look at column S for the MCC.



Refresh the Pivot Table

The most efficient method to review the data is to use the pivot table, found on the *P-Card Compliance Pivot Table* tab. Click on that tab and then anywhere in the empty pivot table

that i there.



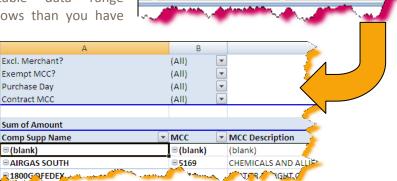
ø

Refresh

On the Options menu tab (Excel 2007), click on the *green refresh arrows*.

The pivot table will populate. If you see (blank) in any of the columns, this means that the pivot table data range encompasses more rows than you have

data on. This is not a problem. If you want to change the data source to include only rows with transactions, you can do that.



Add-Ins

Change Data

Source ▼

Data

Options

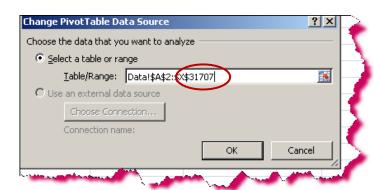
Clear

Design

Select

Actions

Click on the *Change Data Source* button (see above), next to the *Refresh* button. In the dialog box, click at the end of the cell range, backspace out the current row number, and enter the new row number as shown and click *OK*. The pivot table will automatically refresh. If it does not, click the *Refresh* button.

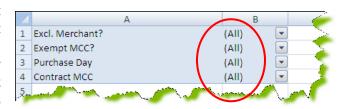


Pivot Table Design

The pivot table uses **Report Filters** (known as **Pages** in Excel 2003) to isolate transactions based on specific criteria.

When the filters are set to pull all transactions, as shown by the *(All)* in column *B* (see diagram), then all transactions are included in the pivot table. When the values in the filters are changed, transactions that meet <u>all</u> criteria will be included in the pivot table data. The transactions are still on the *Data* tab. They just aren't included in the values reflected on the pivot table.

Users who are comfortable with pivot tables can change the design to suit their needs. It is recommended, though, that you keep a master copy of the P-Card Compliance Workbook with any *Lookups* tab customizations that you might have done.



Definitions

For more information, see *Getting to Know the Data Tab* above and *Maintaining the Lookups Tab* below.

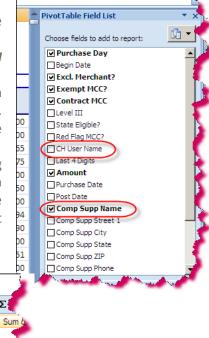
- Excl. Merchant? This term refers to merchants that have been previously identified as contract merchants, such as Staples or W.W. Grainger. This filter corresponds to Column C on the Data tab. As more contract vendors are identified, the vendor name as it comes across from the Bank can be added to the lookup table so that it can be excluded in the future.
- Exempt MCC? The State Purchasing Division has classified multiple NIGP codes as being exempt from State Purchasing Division rules. The complete list of these is found on the State Purchasing Division web site. Certain MCC's have been classified as exempt based on the NIGP that it would probably correspond with. This filter corresponds to Column D on the Data tab.
- Purchase Day This filter allows the user to focus on purchases based on the day of the week, such as Saturday or Sunday, in order to identify possible misuse of the card. However, not all weekend purchases are inappropriate. The cardholder's job requirements will influence when purchases are made. This filter corresponds to Column A on the Data tab.
- Contract MCC This filter allows the user to focus on transactions at merchants that have the same MCC as a known contract vendor. It is helpful in identifying possible failure to use contracts. This filter corresponds to Column E on the Data tab.

MODIFYING THE PIVOT TABLE DESIGN

The pre-designed pivot table on the *Compliance Analysis* tab uses the merchant name as one of the Row Labels. However, in your work, you might want to see cardholder names instead of merchant names. To do this:

MCC MCC Description
CH User Name

- 1. Unclick the box next to the merchant name (*Comp Supp Name*).
- 2. Click the box next to the cardholder name (*CH User Name*).
- 3. You will want to have the cardholder name in the first column of the pivot table, *column A*. Simply drag-and-drop the field name to the top. See diagram below.
- 4. You can also show the merchant name along with the cardholder, either as the first column or as the second column. Manipulate the pivot table to determine the best way to meet your review objectives.



SUGGESTED ANALYSIS STEPS

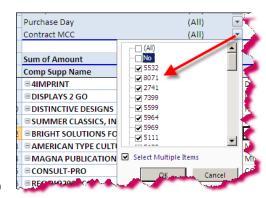
Using the filters and reconfiguring the pivot table allows you to select transactions for review based on specific criteria. The suggestions for use in this user's guide are not the only possibilities but are intended to get you started. As you become more familiar with the pivot table and the various formulas used to provide more information about the transactions, you can reconfigure the pivot table in multiple ways to fine-tune your review.

Open Market Purchases

Transactions at vendors that have not been previously identified as contract or mandatory source merchants would be considered "open market" purchases. These purchases will fall into two categories: (1) those at exempt MCCs (NIGPs) and (2) those at MCCs that are not exempt.



- Select "No" from the Excl. Merchant? Report Filter. The pivot table will reflect the
 merchant name and the total dollar amount of transactions at merchants that have
 not been previously identified as a Statewide or State Entity contract or as
 mandatory source regardless of the NIGP. If you have customized the merchant list
 to include your State Entity merchants, these will be excluded as well.
- Perform any or all of the following steps. Each activity is designed to be done separately, not at the same time.
- If a merchant has more than \$5,000 in spend during the cycle, pull all transactions
 with that merchant from Works Payment Manager for the previous six months to
 determine if this is an opportunity for a State Entity contract. If you have access to
 - queries in PeopleSoft, you can also pull spend there to determine if between the two methods of procurement, P-Card and purchase order, there is enough spend to justify the effort to create a contract.
- Select "No" from the Excl. Merchant?
 Report Filter and the Merchant Category
 Codes shown in the Contract MCC Report
 Filter (i.e. select every value in the list
 except the "No") to determine merchants
 that have not been previously excluded AND
 that have the same MCC as an excluded
 merchant. These transactions could be
 cases where the cardholder could have or
 should have purchased the items from a
 contract vendor or from a mandatory
 source.





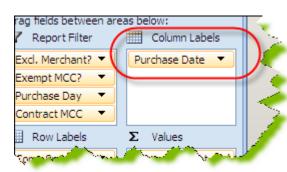
To see these transactions, double-click on the dollar value. The transactions will be copied to a new spreadsheet in the workbook. Review the documentation to determine if the items purchased were available on a contract.

Select "No" from both the **Excl. Merchant?** and the **Exempt MCC?** Report Filters. The pivot table will now reflect transactions at merchants that have not been identified as contract merchants <u>AND</u> where the MCC is not exempt. You can also select the known contract MCCs from the **Contract MCC** Report Filter as described in the previous activity. Review these transactions to determine if the cardholder(s) should have used contract merchants. Remember that even if a purchase is exempt from State procurement regulations, the cardholder must still follow the Order of Precedence and use contract vendors.

Split Purchases

Add the *Purchase Date* field to the pivot table as a *Column Label*. Determine if any vendor had spend in excess of \$5,000 on a single day or on consecutive days. (HINT: The easiest way to scan through the data quickly is to apply conditional formatting to highlight any cell greater than or equal to \$5,000 and then look for the highlighted cells.)

If the answer to either of the following questions is "Yes", then investigate for possible split transactions.



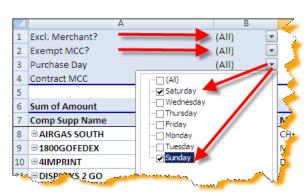
- Did a single cardholder have all transactions?
- Did two or more cardholders in the same work unit make the transactions?

Weekend Purchases

Select "All" from each Report Filter to reset the pivot table to its original configuration. Using the *Purchase Day* Report Filter, select "Saturday" and "Sunday" to review transactions made on the weekends.

Review such combinations as merchant name, MCC description, and cardholder user group to determine if a weekend transaction would be reasonable. If not, investigate those transactions.

You can also select "No" from both the *Excl. Merchant?* and the *Exempt MCC?* Report Filters to eliminate transactions from contract merchants or at exempt MCCs. If a cardholder is abusing the





card, the abuse will probably not be at contract or exempt MCCs simply because of the nature of the transactions. However, you might want to investigate some contract transactions, such as automotive parts or office supplies.

Merchant Utilization

There are times when you might want to see if there is a merchant that only one cardholder is using. It is more likely that any personal use will be at merchants that other cardholders do not use. To determine if there are any merchants that fit this category, configure the pivot table so that the merchant name is the first Row Label and the cardholder name is the second Row Label.

Keep in mind that if only one cardholder uses a merchant, this does not indicate fraudulent use. The cardholder's job description, work unit, and other factors determine which merchants a cardholder uses. Moreover, it is possible for a cardholder to make personal purchases at merchants that everybody uses, such as Staples or Home Depot.

Combined P-Card and Financial System Spend

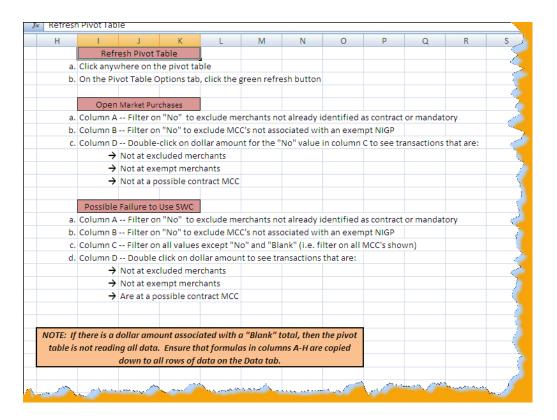
Periodically, you should download purchase order spend and vouchers without purchase orders from the financial system for the same time period and compare to spend on the P-Card. The Agency/University Procurement Officer should be doing this as part of the regular spend analysis.

Use of the P-Card increases efficiency in most procurement operations and eases the burdens on the Accounts Payable staff. Review the list of vendors used in PeopleSoft with the merchant names in the P-Card spend data. Answer these questions:

- Are buyers who are also cardholders both issuing purchase orders and using the P-Card with the same merchant?
- Are there local businesses on the list of purchase order vendors that probably serve the general public? If so, then they probably accept credit cards and would accept the P-Card.

SAMPLE CRITERIA PIVOT TABLE

The *Compliance Pivot Table* tab summarizes transactions by merchant name. This allows you to view the merchants involved when you are looking for suspicious transactions. The *Sample Criteria Pivot Table* tab contains a pivot table that summarizes transaction data according to "Excluded Merchants", "Exempt MCC", and "Contract MCC" status. The tab contains instructions on how to use the filters to isolate transaction dollar amounts at all merchants meeting the criteria selected in the filters. This tab is useful if you want to kick transactions out to separate spreadsheets based on their criteria in order to select a representative sample from each category.



MAINTAINING THE LOOKUPS TAB

The Lookups tab contains all of the ranges of data used in the VLOOKUP formulas on the Data tab. Some of these ranges can be customized to fit your needs.

Excluded Merchant (columns A-C)

Merchant names do not come across from the Bank in the same format as the vendor name in the PeopleSoft financial system. As a result, you cannot simply put all of the contract merchant names on a spreadsheet and use it. As contract merchants are identified, they must be added to the lookup range. The State Purchasing Division Process Improvement Team will update the P-Card Compliance Analysis Workbook on a monthly basis *if any new merchants were identified*.

You can also maintain the list on your version of the workbook. If you identify a new SWC or State Entity contract merchant, those merchant names should be entered on the list.

Go to the first empty row in *Column B*, and enter the new vendor name and "Yes" in column C. The formula on the Data tab will automatically reflect the new value. You will need to refresh the pivot table in order for transactions at the merchant to be excluded.

A		В	С
1	Excluded	Excluded Merchant	Answer
176		47132 FLETCHER OIL C	Yes
177		HARRISON TIRE COMPANY	Yes
178		FLETCHER OIL CO INC	Yes
179		HIGHLAND TIRE AND AUTO	Yes
180		PHOENIX OIL CO	Yes
181		New vendor name here	Yes
182			Yes
182	A. A. A.	and the same of th	Ves

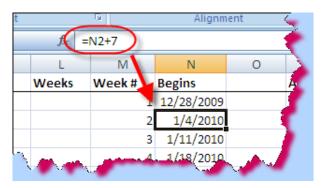
Level III Merchants (columns E - F)

The Process Improvement Team has already identified several merchants that transmit this level of detail. These are merchants are already on the Lookups tab. You can determine if a merchant transmits Level III (line item) detail by creating a report in Works Payment Manager that pulls data fields from the "Transaction Details" section. There will be one line for each line on the invoice or receipt. When you find a new one, simply add the merchant name to the list as you did for the Excluded Merchants.



Weeks (columns L - N)

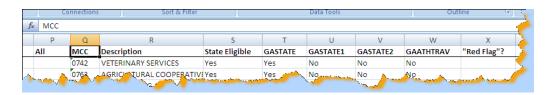
There might be an occasion, such as looking at split purchases, when you might want to see all transactions during a certain week. *Column B* on the *Data* tab reflects the Monday of the week during which a transaction took place. This table must be maintained annually. Enter the Monday of the week during which the new year starts. For example, if January 1st is on a



Friday, the previous Monday would have been December 28th. Enter that date in cell **N2**. The remaining date cells will calculate based on the previous date plus seven days.

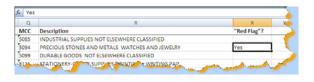
State Eligible MCCs (columns P - W)

These columns show all Merchant Category Codes and the State-authorized MCC groups to which they belong. There are not many MCCs that are not in at least one group. The Process Improvement Team will update this list if new MCCs are added to groups or if new groups are added. If you have received approval to use an MCC that is not in one of the State-authorized groups, you can change the "No" in *column S* to "Yes" so that the formula on the *Data* tab will mark that transaction as conducted at an authorized MCC.



"Red Flag" MCCs (columns Q - X)

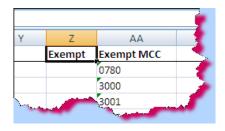
If your want to focus attention on transactions at merchants with specific Merchant Category Codes, even if they are allowable, you can use the "Red Flag" column on the MCC table to do this. Simply put the word "Yes" in column X on



the row for that MCC. The Data tab will reflect the "Yes" in *column H*. You can either filter on those transactions on the *Data* tab or add this column to the Report Filters on the pivot table. You can also use this column to focus on specific spend areas.

Exempt MCCs (columns Z - AA)

The State Purchasing Division has ruled that certain NIGP (National Institute of Governmental Purchasing) codes are exempt from the State Purchasing Act. This list is available on the SPD website at



http://doas.ga.gov/StateLocal/SPD/Docs_SPD_General/NIGPExemptList.pdf

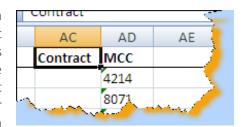
The State Purchasing Division updates this list if other NIGPs are determined to be exempt. The Process Improvement Team has identified Merchant Category Codes that are possible equivalents of the NIGP code. These are shown on the Lookups tab in the "Exempt" range name. Since there is no direct correlation between MCCs and NIGP codes, this list is not guaranteed to be infallible. However, this Report Filter can exclude some transactions that *might* be exempt. Transactions at some merchants with "exempt" MCCs might not be exempt when the details are reviewed. When conducting an audit, the user should sample these transactions to determine if they are exempt.

This is especially critical if a single purchase or multiple purchases exceed the \$5,000 bid limit or were purchased from a non-contract vendor. Remember – cardholders must still follow the Order of Precedence, even if the NIGP/MCC is "exempt".

While the user can add MCCs to this list, it is not recommended unless the Process Improvement Team updates it since you might exclude some transactions that are, in fact, non-compliant.

Contract MCCs (columns AC-AD)

Contract MCCs are those MCCs that are associated with known Statewide Contract vendors. Purchases at merchants that have not been previously identified as contract AND have the same MCC represent possible failure to use a contract merchant. As with the exempt MCCs, this list is not guaranteed to be infallible. The user should not assume that all transactions could have been purchased from a contract vendor. Only review of the documentation will determine that.



Department of Administrative Services State Purchasing Division Process Improvement



DOCUMENTATION REVIEW

Purchases of Supplies and Materials

There is no one right definition of adequate documentation for all transactions. The nature of the goods or services received determines what information the invoice or receipt must contain. However, all invoices should contain basic information about the transaction. These are:

- Vendor or merchant name
- Transaction date
- Line item information
 - Quantity
 - Description
 - Unit Price
 - Line Price (quantity times unit price)
- · Total invoice amount
- Attestation of receipt of goods or services
 - If the documentation is a cash register receipt, then the cardholder's signature should be on it.
 - If the items were shipped, the receiving employee should sign the packing slip, and the invoice if it comes in the shipment, and send to the documentation to the cardholder. The cardholder should keep the original, signed packing slip and invoice with the transaction log or monthly billing statement.

Specialized Transactions

In addition to the above information, good accounting practices dictate that certain transactions have the following documentation:

Subscriptions (Newspapers, magazines)

- Length of subscription or renewal
- Name of periodical
- Name of employee for whom periodical was ordered
- Delivery address for the periodical
- Cardholder should sign original order or renewal form

Organizational Memberships

- Name of employee for whom the membership is paid
- Length of the membership period

Freight Charges (when billed by a third party)

- Origination point
- Destination point
- Nature of items being shipped
- For payments to shippers such as FedEx and UPS, the cardholder should attach the statement from that company showing all shipments and the amounts for each individual delivery.

Conference Registrations

- The Department of Audits and Accounts does not consider conferences registration
 fees to be employee travel. Therefore, cardholders can use the card for registration
 fees. It is up to the agency or institution to prohibit this type of transaction. The
 documentation must include:
- Copy of the registration showing who is attending
- Copy of the agenda or program

Airline Tickets

- A copy of the itinerary showing the name of the employees flying and the purpose of the trip must support charges for airline tickets. If the agency pays for non-employee flights, then the documentation must include an explanation for the charge.
- The cost of shuttles to and from the hotel and the airport are employee travel expenses and cannot be put on the purchasing card. Employees must pay these charges and receive reimbursement on a travel reimbursement form.

Group Meals

The State Accounting Office issued its Employee Group Meals Policy on October 1, 2006. Refer to the Statewide Travel Regulations on their website. Meals that meet the requirements for group meals must have the following documentation in addition to the invoice from the caterer or restaurant providing the meals:

- Prior written approval from the agency or department head
- Roster signed by all employees participating in the event
- Agenda or other documentation showing the purpose of the event at which the meal was served

Printing

- Copy of finished product
- Job order or other document showing the number of documents printed

Newspaper or Internet Advertisements

- Copy of the newspaper advertisement as printed and the date(s) printed
- Print screen of the actual advertisement on the Internet site.

OTHER PURCHASES

Payment from Statements

Cardholders must pay from an invoice when at all possible. If a merchant regularly holds invoices and generates charges only from a monthly statement to its customers, then the cardholder must retain all individual invoices and attach them to the statement as documentation that the statement reflects the total amount of charges. The cardholder should staple the invoices to the statement and attach an adding machine tape proving that the total of the invoices matches the amount on the statement.

Recurring Monthly Charges (Services)

If merchants do not send out monthly statements, either through regular mail or via email, then the cardholder should attach a copy of the original order for the service showing what the monthly amount will be and the length of the term of service. The cardholder must document any change in the amount charged compared to the amount shown on this documentation with a new notification from the merchant. Notes generated by the cardholder to this effect are not adequate documentation for the price increase or decrease.

Non-Inventoriable Assets

State Entities must record any single piece of equipment with a cost greater than \$1,000 for agencies or \$3,000 for colleges and universities in asset inventory. State policy prohibits use of the purchasing card for the purchase of any asset that must be included in the asset inventory.

The State Purchasing Card Policy allows the purchase of equipment under these thresholds and recommends that entities also maintain any easily misappropriated equipment, such as digital cameras, in the asset inventory. Documentation for this type of purchase must include:

- Location of the items purchased
- Asset tag/decal number (if not indicated on the invoice, auditors will request to verify the existence and location of the asset)

Department of Administrative Services State Purchasing Division Process Improvement



CONFIGURABLE REPORTS IN WORKS PAYMENT MANAGER

OVERVIEW

Works Payment Manager (Works), the on-line card management system provided by Bank of America, uses reports to download transaction data for analysis with either Microsoft Excel or Microsoft Access or to a PDF document for reports that will be printed. For most analyses a State Entity will want to do, the data can be downloaded to Excel. However, if the number of rows exceeds the row limit in older versions of Excel (65,535), then the transactions must be downloaded to a text file or to multiple Excel files. Both types of files can be used in Excel or in Access.

Works allows the user to select which data fields to include in a report or download. This is done in the *Configurable Reports* section.

CREATING A REPORT

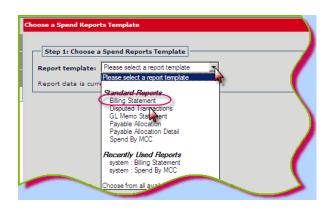
After logging into Works,

- Click on *Reports* to display the list of report options
- 2. Click on *Reports* to display the list of report categories
- 3. Report categories are shown in the illustration to the right. Transaction downloads are done in the *Spend Reports* section.
- 4. Click on Spend Reports.



Works has certain standard reports that can be run as-is. These reports can also be configured by adding and removing data fields. In order to configure a report, the user has to start with one of the existing reports, or templates.

- Click on the arrow in the Report Template drop-down list.
- To download transactions, start with the *Billing Statement* report by clicking on it.
- The Report Configuration screen will display. This screen has six sections.



Report Configuration Screen Sections

Step1: Choose a Report Template

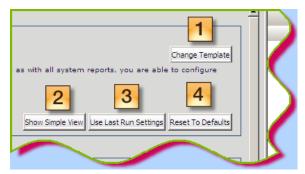
Once you select your template, shown above, options for the template display. The default display is **Show Expert View**, which allows the user to see all data fields available and other report options. The **Simple View** allows the user to change a template, to specify the output format (e.g. Excel), and to enter parameters in the filter options.

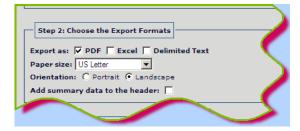
- 1. You can change the template if you decide the one you chose is not correct.
- 2. Simple View displays just the fields to enter criteria for transaction selection. To
 - show just the *Simple View*, click the button here. The button name will change to *Show Expert View*. Both views are discussed in more detail below.
- 3. **Use Last Run Settings** allows you to immediately run a report using the template as it was configured for the previous run.
- 4. **Reset to Defaults** sets the template back to the original Works design settings.

Step 2: Choose the Export Formats

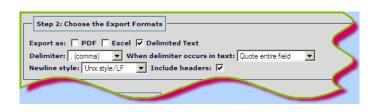
Available formats are PDF, Excel, and Delimited Text. Click the desired check box.

The *Paper Size, Orientation, Add summary data to the header* options are only available for PDF documents.



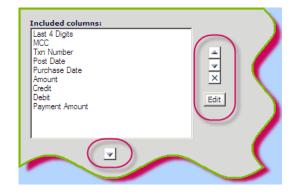


If you select *Delimited Text*, you have the option to select a delimiter (e.g. comma), what to do if the selected delimiter occurs in the field value itself, and to include the field names as column headings on the first row of the file. This is helpful if the text file will eventually be opened with Excel.



Step 3: Configure Report Columns

This is the section where you tell Works Payment Manager which data fields you want to include in the report. The *Included Columns* area displays the fields currently on the report. These fields can be moved up or down, deleted, or edited by clicking on the buttons to the right of the listing. The field can be moved to the *Sort Columns* list by clicking the down arrow button beneath the listing.



The *Sort Columns* list allows you to move fields up and down to change the sort order or to delete the fields from the sort order using the same type of buttons as the *Included Columns* listing.

The **Available Columns** listing categorizes available data fields based on the type of data. The categories that are most useful for the State of Georgia are:

- Allocation information on how a transaction was allocated in the General Ledger
- Card information about the cardholder's card
- Card Profile spending limits for the profile to which the cardholder is assigned
- Cardholder information about the cardholder. The most useful field here are the **CH User Name**.
- Cardholder Group the work unit or other grouping to which the cardholder is assigned.
- Company Supplier information about the merchant.
- Orig[inal] Transaction basic information about the transaction
- Program Card information about the State Entity's card program
- Transaction additional information about the transaction
- Transaction Detail information about Level III detail, when available

To select a field to include in the report:

- 1. Click on the field name
- 2. Click the arrow button to move it to the *Included Columns* listing.

Use the up and down arrow buttons shown above to arrange the columns in the desired order. Use the down arrow button under the field listing to

indicate the fields to be used f or sorting. Arrange the columns in the desired sort order, using the up and down arrow buttons. Click on a

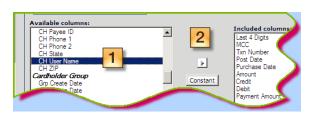
field name and then the **X** button to delete a field from the sort layout.

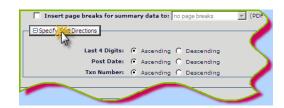
Click on the *Specify Sort Directions* button to reveal the sort fields and click the radio button for either *Ascending* or *Descending*.

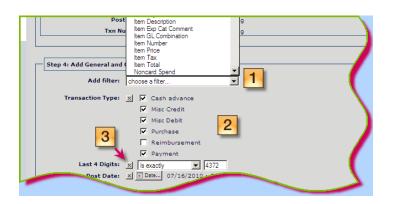
Step 4: Add General and Column Filters

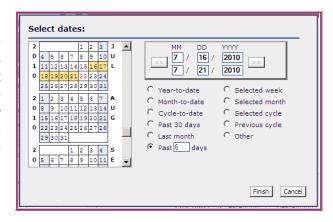
Any field, regardless of whether or not it is included in the field list for the report, can be used as a filter. A filter is where you tell Works Payment Manager to limit the transactions it pulls based on certain parameters, such as between certain dates or for a specific cardholder or merchant.

- Click on the drop-down arrow to scroll the fields. Click on the desired field name to display it in the filter list.
- The filter list displays below the drop-down list. When Works runs the report, only transactions that meet ALL of the criteria will be pulled. In the example above, only transactions on the card that ends in the Last 4 Digits and are on the Post Date shown will be retrieved.
- 3. Click on the **x** button next to a filter to remove it.









Specifying parameters

Some fields used as filters have a button to click in order to enter the parameters. In the illustration above, clicking on the *Date...* button next to *Post Date* displays the *Select Dates* dialog box. Select from any of the pre-designed parameters or manually enter the dates in *mm-dd-yyyy* format. Click *Finish* to return to the report design screen.

Step #5: Bookmarking

Bookmarking is the Works word for **saving** the report template.

- 1. Click on the checkbox next to **Bookmark this report template**.
- Enter a Bookmark name (report name) and Description for the report.

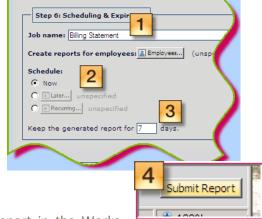


3. Make sure that the *Personal* radio button is selected. Only Works administrators can create *Company* reports. *Company* reports can be seen by all Works users at your Entity.

Step 6: Scheduling & Expiration

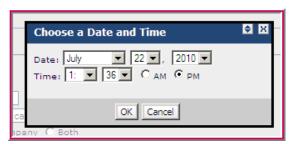
Reports can be run **Now** or at a later specified time. Reports can also be scheduled to run on a recurring schedule (e.g. every Monday morning at 7:00). Works will also keep a copy of the report for a specified number of days.

- Specify the *Job Name*. This can be the name of the report. However, if you are running several versions of the report (e.g. multiple cardholders), you will want to give each one a different name so that you will be able to find it easily later.
- 2. Click *Now* to run the report now.
- 3. Indicate the number of days to keep the report in the Works system.
- 4. Click the *Submit Report* button in the lower right-hand corner.



SCHEDULING REPORTS

- Click on the Later... radio button and the Later... button. The Choose a Date and Time dialog box will display. Enter the date and time and click OK.
- Click on the *Recurring...* radio button and the *Recurring...* button. The *Report recurrence* dialog box will display. Enter the information and click *OK*.
- Click on the Submit Report button to schedule the reports.



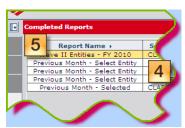


RETRIEVING A REPORT

Works Payment Manager saves reports for the number of days specified when the report was run. The default for this time period is seven days, but the user can change this to any number of days.

Reports are stored in the Reports section under *Completed Reports*.

- 1. Click on *Reports* to display the list of report options.
- 2. Click on *Reports* to display the list of report categories.
- 3. Click on *Completed Reports* to display all saved reports.
- 4. The list of reports that have been run and are still in the Works system and available for download displays on the screen.
- 5. Click on the report name to highlight it.

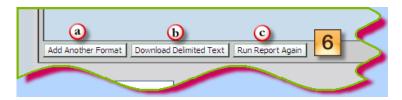






6. The **Report Info** screen will display at the bottom with information about the report and with three option buttons in the lower left-hand corner.





- a. Clicking the Add Another Format button allows you to select a different format (e.g. PDF instead of Excel). Works will run the report without any other input from you. The report will show as Awaiting Processing and both output formats will display in the Requested Export Types column
- b. Clicking the *Download [file format]* button will start the download process for the report. You can either *Open, Save,* or *Cancel* the operation.
 - Click Open to open the file and view on the screen.
 - Click Save to save the file to a network drive or the hard drive of your computer.
 - Click Cancel to stop the download process.
- c. Clicking *Run Report Again* takes you back to the report configuration screen so that you can modify the report design or enter a different set of parameters for the same report.



MANAGING "BOOKMARKS"

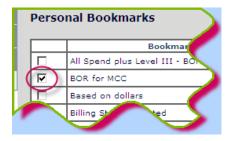
Bookmarks are the templates for the reports that you have created. You can delete those that are no longer needed by going to **Reports** → **Bookmarks** → **Management** on the menu on the left-hand side of the screen.



Click on *Management* to display the reports divided into sections for *Personal Bookmarks* (those only you have access to) and *Shared Bookmarks* (those that multiple users have access to). Only someone with *administrator* privileges can create a shared bookmark.

To delete a bookmark, click on the box next to the **Bookmark Name** and then the **Delete** button in the lower right-hand corner. Make sure that you want to delete the bookmark because you will not be prompted to make sure once you click **Delete**.

If you need additional help with Works Payment Manager reports, you can access the Works training information by clicking on *Tools* \rightarrow *Training and Help* \rightarrow *Documentation* to display the Works Payment Manager user manual. This manual can also be downloaded and saved as a PDF file.





Department of Administrative Services State Purchasing Division Process Improvement



USING EQUOTE FOR OPEN STATE ENTITY CONTRACTS

OVERVIEW

The APO/CUPO identifies a need for an Open State Entity Contract through analysis of purchases. The need for an Open State Entity Contract is justified by the following:

- The need cannot be met through a statewide contract, an existing entity contract, or a mandatory source;
- The need exceeds (or is expected to exceed) the \$5000.00 threshold within a given fiscal year and must be competitively bid; and
- The exact quantities or total number of orders are not known.

The following describes the action steps for the APO/CUPO for creating an Open State Entity Contract according to 7-Stage Process:

1. Purchasing Stage 1-Needs Identification

- 1.1 Through purchase analysis (through PeopleSoft and WORKS Payment Manager), the APO/CUPO determines that an Open State Entity Contract is needed as described above.
- 1.2 The APO/CUPO's analysis of previous and anticipated future purchases should assist the APO/CUPO in identifying associated stakeholders and the benefits associated with a State Entity contract (e.g. savings associated with aggregated spend). The APO/CUPO should review purchases and future needs of all of the State Entity's divisions/business units.

2. Purchasing Stage 2-Pre-Solicitation

2.1. APO/CUPO assembles a sourcing team, which consists of existing stakeholders (i.e. end users, project facilitator, etc.). APO/CUPO facilitates meetings by the sourcing team to prepare for the solicitation preparation stage:

Review existing solicitations, contracts, etc., to identify suppliers with whom the State Entity has conducted business and also analyze the market to identify additional sources of supply, market dynamics, and industry standards (i.e. minimal warranty terms, etc.)

Discussion: Analysis of the market and sources of supply provides critical information to the sourcing team, including understanding how items may typically be bundled or sold,

which will assist the source team in organizing the solicitation. For example, if all suppliers provide all of the needed items, then the sourcing team may consider making a single award. However, if the market analysis reveals there are suppliers that provide some but not all items, then the needed items may be best organized into categories or subcategories with split awards.

Establish a core item list for current needs and possible future needs. The core item list contains the essential items expected to be purchased by the State Entity as a whole.

Determine what other items in addition to the core items list should be included in the Open State Entity Contract. For example, are there value added items such as extended warranties or additional services which should be included? Is it desirable to establish a minimum percentage discount off of the supplier's catalog?

2.2. APO/CUPO should determine best sourcing method* based on items to be sourced.

*The remainder of this document has been developed based on the assumption that the RFQ is the desired sourcing method and that the APO/CUPO will utilize eQuote to conduct the RFQ.

3. Purchasing Stage 3-Solicitation Preparation

3.1. To fully develop the RFQ, the sourcing team must address several key questions in conjunction with the APO/CUPO:

What are the bid factors? For example, will the RFQ request references or minimum experience? Is there any required certification which the supplier must possess?

What are the key requirements and terms? For example, are there certain minimum performance levels which must be met by the supplier such as delivery or response times? How will the State Entity address requests for price increases? The RFQ/contract must stipulate that cost will remain fixed throughout the duration of the contract. In addition, the RFQ/contract must state that no price increases will occur unless it is approved in writing by the State Entity. The APO/CUPO may wish to include a price escalation clause, which establishes the basis for determining whether a price increase may be granted (for example, whether there is an increase in pricing according to a designated product index) as well as the limits to the number of price increases which may occur as well as the amount.

Should the APO/CUPO schedule a site visit and/or pre-bid conference? If so, should supplier attendance be mandatory? How much time should be permitted for supplier questions?

How will pricing be requested? There are three common approaches for requesting pricing, and all three approaches require a core items list (representative market basket). The first approach is to send the core item list as part of the solicitation and have offerors bid on the specific items referenced on the core items list. The second approach is to request the offerors provide their catalogs and provide a discount off their catalog price. The third approach is to standardize on and reference a specific manufacturer's catalog and request offerors bid a discount off the catalog price. There are strengths and weaknesses for each approach that need to be explored by the

sourcing team prior to selecting an approach. Additionally, the sourcing team must decide if the core items will be identified by line item within eQuote OR if the APO/CUPO will attach an Excel sheet with the list of the core items.

- Note: SPD will update eQuote training and the eQuote manual to address these
 options.
- Note: Items requiring particular branding will require Sole Brand Justification (SPD-NI003b).

What other documents will be included with the RFQ? For example, for all contracts with an estimated value in excess of \$100,000, the APO/CUPO must request verification from the Department of Revenue that the supplier is not a prohibited source. Therefore, in this example, the APO/CUPO must attach the Sales and Use Tax Compliance form. In addition to identifying necessary forms, the APO/CUPO must attach an approved contract which identifies any renewal options and how those renewal options will be utilized. (Note: SPD must provide prior written approval in the event the State Entity desires to establish a contract which will exceed five (5) years.)

3.2 The APO/CUPO must finalize the evaluation process with the sourcing team. For example, the APO/CUPO and the sourcing team must understand that any requirements of the RFQ must be evaluated on a pass/fail basis and, as a result, any supplier incapable of meeting the identified requirements will be disqualified as nonresponsive. By discussing this with the sourcing team, the APO/CUPO can confirm whether certain identified requirements are actually desirable/needed. With respect to the pricing evaluation, the APO/CUPO and the sourcing team should determine whether certain items will include estimated quantities for the purpose of evaluation. Utilizing estimated quantities will allow certain products to have greater weighting for purposes of determining the supplier providing the best pricing. For example, if the sourcing team determines certain items will be purchased with much greater frequency than other items, weighting the more popular items with a greater quantity will provide a better analysis of which supplier will provide the best savings based on the State Entity's expected buying pattern.

4. Purchasing Stage 4-Solicitation Process

- 4.1. Post RFQ in accordance with GPM guidelines to eQuote and ensure you indicate Pre-Bid Conference information in the bid description. Attach all documents applicable as suggested above.
- 4.2. Address all supplier questions in writing and post answers to questions publicly as an attached document to the RFQ prior to the closing of the RFQ.
- 4.3. Make any necessary changes to the RFQ in writing by posting an addendum to the RFQ prior to the closing of the RFQ. The APO/CUPO may need to extend the RFQ closing date in the event an addendum is posted near the current RFQ closing date. Remember no changes may be made to the RFQ after the RFQ has closed.
- 4.4. Receive all bids through eQuote. eQuote terminates suppliers' access to the RFQ once the RFQ closing date and time has expired.

5. Purchasing Stage 5-Evaluation Process

As noted in the Georgia Procurement Manual, the RFQ must be awarded to the lowest priced, responsive and responsible bidder with whom the State Entity is able to reach agreement as to contract terms. There may be more than one awarded supplier in the event the State Entity elects to make split awards. Although the majority of the evaluation may be conducted by the APO/CUPO, the APO/CUPO should utilize its subject matter experts to determine whether alternate precuts may be considered equivalent (to the extent the RFQ named certain brands but permitted equivalent products to be offered).

6. Purchasing Stage 6-Award Process

Public notice of the results of the RFQ must be provided as required by the GPM through the posting of the Notice of Intent to Award (as appropriate) and the Notice of Award. The Notice of Award should not be issued until the State Entity has either issued a PO or the State Entity's contract has been fully executed. Please note the Notice of Award must be issued within one day of the PO being issued or the contract being signed (whichever comes first). Any supplier challenges to the process will be resolved in accordance with the protest process defined by the GPM.

7. Purchasing Stage 7-Contract Process

- 7.1. Contract will be maintained in accordance with the GPM and posted to the Agency Contract Index on the Georgia Procurement Registry (as appropriate).
- 7.2. Contract Kick-off meeting should be conducted with the vendor and stakeholders to review the terms and conditions, order process and general contract information. This will help with getting the contract off to a good start. Please review GPM Chapter 6 "Contract Administration" for additional guidance in contract management.
- 7.3. Annual evaluation will be conducted with end users utilizing the Contract Assessment Report (SPD-CP025). In the event the State Entity desires to renew the Open State Entity Contract, the renewal shall be exercised in accordance with the terms of the contract and the applicable provisions of the GPM, which identifies the applicable forms such as the Notice of Award Amendment Form (SPD-CP024).

Forms are located at: http://doas.ga.gov/StateLocal/SPD/Seven/Pages/Home.aspx.

Department of Administrative Services State Purchasing Division Process Improvement



APPENDICES

APPENDIX A - STATE USE PROCUREMENT LIST

The items listed on the STATEUSE PROCUREMENT LIST (PeopleSoft Contract # GEPS-CERT) can be viewed and purchased from the Window Shopper catalogue or from Georgia Enterprises for Products and Services (GEPS). The links for these sites are:

Window Shopper: https://solutions.sciquest.com/apps/Router/Login?OrgName=Georgia

GEPS: http://www.georgiaenterprises.com/

The current State Use Procurement List can be found on the State Purchasing Division web site at http://doas.ga.gov/StateLocal/SPD/Contracts/Pages/Home.aspx

PeopleSoft Contract # GEPS-CERT					
NIGP Code	Product Description	Price	Product Status		
2019800003	Yellow Rubber Work Gloves - per case (144 pairs)	\$91.52	Mandatory		
2019800005	Food Service (Polyethylene) Gloves - per case (10,000 gloves)	\$67.82	Mandatory		
2019800002	Leather Work Gloves -XL per case (120 pairs)	\$189.27	Mandatory		
4754161100	Medical Exam Gloves (Small) - per case (1,000 gloves)	\$69.97	Preferred		
4754161200	Medical Exam Gloves (Medium) - per case (1,000 gloves)	\$69.97	Preferred		
4754161300	Medical Exam Gloves (Large) - per case (1,000 gloves) Medical Exam Gloves (Extra-Large) - per case (1,000	\$69.97	Preferred		
4754161400	gloves)	\$69.97	Preferred		
	First Aid Kits (\$50 minimum order for kits and/or repla	cements items)			
3453200001	Plastic 10 Person First Aid Kit	\$18.65	Mandatory		
3453200002	Plastic 25 Person First Aid Kit	\$21.04	Mandatory		
3453200003	3453200003 Plastic 50 Person First Aid Kit		Mandatory		
3459800016	Metal Standard 10-Unit First Aid Kit	\$37.95	Mandatory		
3459800017	Metal Standard 16-Unit First Aid Kit	\$53.06	Mandatory		
3459800018	3459800018 Metal Standard 24-Unit First Aid Kit		Mandatory		
3459800019	Metal Standard 36-Unit First Aid Kit	\$91.24	Mandatory		
	First Aid Kit Content Replacement (\$50 m	in order)			
3459800021	Ammonia Inhalants (10)	\$2.63	Mandatory		
3459800075	Antimicrobial Towelettes 10	\$1.80	Mandatory		
3459800022	3459800022 Bandage, 1" x 3" (16) Non Stick Pad		Mandatory		
3459800024	3459800024 Bandage, 2" Non Stick Pad (4)		Mandatory		
3459800025	Bandage, 4" Non Stick Pad (1)		Mandatory		
3459800028			Mandatory		
3459800027	Bandage, Knuckle Non Stick (8)	\$1.21	Mandatory		
3459800026	Bandage, Triangular approx 40" (1)	\$1.66	Mandatory		
3459800032	Eye Dressing Set (1)	\$3.69	Mandatory		

	PeopleSoft Contract # GEPS-	CERT		
3459800033	Eye Wash Solution 1 oz (1)	\$2.87	Mandatory	
3459800034	Gauze 24" x 72" (1)	72" (1) \$2.37		
3459800035	Gauze, Roll, 4" x 6 yards (1)	\$1.53	Mandatory	
3459800036	Hydrocortisone Cream 1 gram (6)	\$1.71	Mandatory	
3459800037	Insect Treatment Swabs (10)	\$2.45	Mandatory	
3459800039	Medicated Burn Ointment 1/8 (6)	\$3.43	Mandatory	
3459800040	Ointment, Triple Antibiotic 1 gram (10)	\$2.31	Mandatory	
3459800041	Poison Plant Treatment 1/8 oz (6)	\$3.33	Mandatory	
3459800045	Tape, Adhesive, Roll 1"x 2-1/2 yd (2)	\$2.36	Mandatory	
3459800048	Venom Extractor Kit	\$18.73	Mandatory	
	Floor Pads (Minimum of 6 cases per order)			
3659800006S	19" Black Stripping Pad (5 per case)	\$28.35	Mandatory	
3659800006B	19" Red Buffing Pad (5 per case)	\$28.35	Mandatory	
3659800007S	20" Black Stripping Pad (5 per case)	\$24.95	Mandatory	
3659800007BBL	20" Blue Luster Burnishing Pad (5 per case)	\$30.98	Mandatory	
3659800007BC	20" Combo Tan Burnishing Pad (5 per case)	\$24.95	Mandatory	
3659800007BP	20" Porko Burnishing Pad (5 per case)	\$30.02	Mandatory	
3659800007B	20" Red Buffing Pad (5 per case)	\$24.95	Mandatory	
3659800007P	20" White Polishing Pad (5 per case)	\$24.95	Mandatory	
	The string rate (o per eace)	<u> </u>	- managed y	
	Mop Handles & Heads			
4859800093	16 oz. Replacement Mopheads (Case of 12)	\$60.10	Mandatory	
4859800094	20 oz Replacement Mopheads (Case of 12)	\$66.35	Mandatory	
4859800095	24 oz Replacement Mopheads (Case of 12)	\$78.00	Mandatory	
4859800096	32 oz Replacement Mopheads (Case of 12)	\$83.52	Mandatory	
4859800087	60" Fiberglass Mop Handles (Case of 12)	\$166.40	Mandatory	
	Soap Pouches			
4859800099	Soap Pouches (enriched) Case of 12	\$71.35	Mandatory	
4859800100	Soap Pouches (antimicrobial) Case of 12	\$75.75	Mandatory	
			1	
	Pallets			
5609800002	7 board (40" x 48")	\$10.67	Mandatory	
5609800001	09800001 8 board (40" x 40") \$10.63		Mandatory	
5609800004			Mandatory	
5609800005	Heavy Weight (40" x 48")	\$14.48	Mandatory	
	Wiping Rags			
7359800001	Wiping Rags (5 pound box)	\$20.65	Mandatory	
NIGP Code	Toner Cartridges (Remanufactured)	Price	Product Statu	
2079800095	12A6765 - Lexmark	\$198.76	Mandatory	

2079800162	12A7305 - Lexmark	\$122.65	Mandator
2077290435	92298A - HP	\$28.32	Mandator
2079800022	92298X - HP	\$79.43	Mandator
2079800099	C2610A - HP	\$41.02	Mandator
2077980453	C3903A - HP	\$31.28	Mandator
2077290456	C3906A - HP	\$49.99	Mandator
2077290460	C3909A - HP	\$92.98	Mandator
2079800023	C4092A - HP	\$26.58	Mandator
2079800024	C4096A - HP	\$39.35	Mandator
2079800003	C4127X - HP	\$38.95	Mandator
2079800004	C4129X - HP	\$59.99	Mandator
2079800090	C4149A - HP	\$57.42	Mandator
2079800091	C4150A - HP	\$86.25	Mandator
2079800092	C4151A - HP	\$86.25	Mandator
2079800093	C4152A - HP	\$86.25	Mandator
2079800025	C4182X - HP	\$63.15	Mandator
2079800075	C7115A - HP	\$30.05	Mandator
2079800076	C8061X - HP	\$44.27	Mandator
2079800094	C8543X - HP	\$129.90	Mandator
2079800154	C9700A - HP	\$59.59	Mandator
2079800155	C9701A - HP	\$84.33	Mandator
2079800156	C9702A - HP	\$84.33	Mandator
2079800157	C9703A - HP	\$84.33	Mandator
2079800086	C9720A - HP	\$90.24	Mandator
2079800087	C9721A - HP	\$90.24	Mandator
2079800088	C9722A - HP	\$90.24	Mandator
2079800089	C9723A - HP	\$90.24	Mandator
2079800158	C9730A - HP	\$140.84	Mandator
2079800159	C9731A - HP	\$141.25	Mandator
2079800160	C9732A - HP	\$141.25	Mandator
2079800161	C9733A - HP	\$141.25	Mandator
2079800028	FX-3 - Canon	\$67.85	Mandator
2079800166	FX-6 - Canon	\$80.55	Mandator
2079800167	FX-7 - Canon	\$85.32	Mandator
2079800152	Q2612A - HP	\$36.53	Mandator
2079800098	Q2613X - HP	\$34.66	Mandator
2079800174	Q2624X - HP	\$70.32	Mandator
2079800178	Q2670A - HP	\$93.60	Mandator
2079800153	Q5942X - HP	\$74.99	Mandator
2079800175	Q5949A - HP	\$40.85	Mandator
2079800177	Q6511X - HP	\$77.39	Mandator

APPENDIX B - HOW TO PURCHASE

Note that the purchasing card can be used for any of these types of purchases provided the cardholder complies with all procurement laws and administrative rules.

PURCHASE TYPE (PS Code)	ORDER OF PRECEDENCE	DOLLAR LIMITS	BID PROCESS (RFx)	COMMENTS
Mandatory Statewide Contract (SWC)	First	No dollar limit	Not Required	State Entity can buy from GCI if same product is offered on Mandatory SWC
State Entity Contract (AC)	Second	Within State Entity DPA	RFP, RFQ (if Team Georgia Marketplace), or eQuote	State Entity Contract renewals are allowed when eligible per terms of contract and entity follows renewal requirements
Mandatory Source (MAN)	Third	No dollar limit	Not Required	Certified Products from GCI and GEPS. Mandatory GEPS products are identified on the State Use Procurement List located at: http://doas.ga.gov/State Local/SPD/Contracts/Pages/Home.aspx
Convenience Statewide Contract (SWC)	Fourth (Optional, choose one from this level)	No dollar limit	Not Required	Convenience Statewide Contracts are available as a "convenience" because prices and contract terms are finalized.
Preferred Products through (GEPS)	Fourth (Optional, choose one from this level)		Not Required	Prices for certain products are identified on the State Use Procurement List located at: http://doas.ga.gov/State Local/SPD/Contracts/Pages/Home.aspx
Open Market (OMP)	Fourth (Optional, choose one from this level)	Within State Entity DPA	RFQ (if Team Georgia Marketplace) eQuote, or RFP	No competition required if < \$5K and can be used with the P-Card where applicable. > \$5K requires competitive bidding
Exempt (EXM)	No State Requirements	No dollar limit	Not Required	Refer to the NIGP Exempt List located at: http://doas.ga.gov/State Local/SPD/Policies/Pag es/Home.aspx

PURCHASE TYPE (PS Code)	ORDER OF PRECEDENCE	DOLLAI LIMITS		BID PROCESS (RFx)	COMMENTS	
Intergovernmental (IGA)		No dollar limit	•	Not Required	Agreement between Governmental Entities	
Sole Source (SS)		Unlimite DPA	d	Post justification with Notice of Intent to Award on GPR	Requires Market Research	
Sole Brand (SB)		Within State Entity DPA		RFQ (if Team Georgia Marketplace), eQuote, or RFP	Specific Brand Product	
Multiple Purchase Types (MUL)	Doesn't alter the responsibility to comply with the Order of Precedence or the requirement to follow the competitive bidding process for Open Market purchases >= \$5,000.				Multiple PO Type, which may be used for the following combinations of purchases on a single PO to a single vendor: 1. OMP less than \$5,000 + SWC 2. OMP less than \$5,000 + AC 3. OMP less than \$5,000 + MAN	
*Note:						
AC, OMP, or SB that exceeds State Entity's DPA must be submitted to SPD for processing by submitting One-Time Request to Exceed DPA for				RFQ = Mandatory to be processed throug the eQuote System with "unlimited" DPA.		
(SPD-NI006) to SPD f	YFA IOIIII	RFP = \$250K DPA Unless other designation has been determined by the Assistant Commissioner of Procurement.				

APPENDIX C - NIGP EXEMPT LIST

EXEMPT	Code	Description			
(All 019 Category	019	AGRICULTURAL CROPS AND GRAINS INCLUDING FRUITS,			
Exempt)		MELONS, NUTS, AND VEGETABLES			
Х	01921	Berry Crops			
Χ	01924	Buckwheat			
Χ	01930	Corn			
X	01932	Cotton			
X	01941	Fruits, Citrus			
X	01942	Fruits, Deciduous Tree			
X	01947	Grapes			
Χ	01950	Hops			
Χ	01953	Melons			
Χ	01956	Nuts, Tree			
Χ	01960	Potatoes, Irish			
X	01962	Pumpkins			
Χ	01966	Rice			
X	01967	Rye			
X	01972	Sorghum			
X	01973	Soybeans			
X	01978	Sugarcane and Sugarbeets			
X	01985	Tobacco			
X	01990	Vegetables			
X	01994	Wheat			
(All 040 Category	040	ANIMALS, BIRDS, MARINE LIFE, AND POULTRY, INCLUDING			
Exempt)		ACCESSORY ITEMS (LIVE)			
X	04001	Amphibia (Frogs, Toads, Salamanders and other Cold			
V	04002	Bloodied Vertebrates) Live Animal Carriers			
X	04002	Animal Carriers Animal Carrers Animal Carrers (Collars, Clothing, Leashes, etc.)			
X	04003	Animal Care Supplies (Collars, Clothing, Leasiles, etc.) Animal Training Equipment and Supplies			
X	04004	Bees			
X	04003	Birds			
X	04007				
^	04008	Cages/Shelters, Animal and Marine Life (See Class 495 for Laboratory Type)			
X	04009	Cats, All Types (Pets)			
Χ	04010	Cattle, Beef (Breeding Stock)			
X	04011	Cattle, Beef (Commercial)			
X	04020	Cattle, Dairy			
X	04021	Chickens			
X	04022	Chicks, Meat Type, Baby			
X	04024	Chicks, Meat Type, Starter			
X	04026	Cockerels, All Types, Baby			
X	04028	Cockerels, All Types, Starter			
X	04030	Dogs, All Types			
X	04035	Earthworms			

EXEMPT	Code	Description			
Х	04037	Electronic Identification Systems Used for Inventory and			
		Tracking of Animals			
Х	04040	Fish, Brood and Fingerling			
Х	04042	Fish (Not Otherwise Specified)			
Х	04045	Fish, Tropical			
Х	04048	Fur Bearing Animals (Not Otherwise Classified)			
Х	04050	Goats			
Х	04058	Hibernation Boxes (Butterfly, Ladybug, etc.)			
X	04060	Hogs (Breeding Stock)			
(All 040 Category	040	ANIMALS, BIRDS, MARINE LIFE, AND POULTRY, INCLUDING			
Exempt)		ACCESSORY ITEMS (LIVE) CONT.			
X	04061	Hogs (Commercial)			
Х	04070	Horses			
X	04071	Houses and Cages, Bird			
X	04075	Marine Life (Not Otherwise Specified)			
X	04080	Mules and Donkeys			
X	04082	Pullets			
X	04083	Pullets, Laying Types, Baby			
X	04084	Pullets, Laying Types, Starter			
X	04085	Rabbits			
X	04086	Recycled Animal, Bird, and Marine Life Accessories and			
		Supplies			
X	04087	Rodents (See 495-12,13 for Experimental Types)			
X	04088	Reptiles, Live			
X	04090	Sheep			
X	04091	Specialty Items for Shows and Entertainment (Perches,			
		Hoods, Hoops, etc.)			
X	04092	Toys for Pets			
X	04093	Turkeys, Baby			
X	04094	Turkeys, Starter			
X	04095	Wildlife and Pet Bands, Labels and Tags (Not Electronic)			
X	04096	Zoo Animals, All Types			
(All 052 Category	052	ART OBJECTS			
Exempt)					
X	05202	Antiques			
X	05208	Ceramic and Glass Objects			
X	05212	Collections, Museum Pieces			
X	05216	Drawings (Originals)			
Х	05224	Engravings, Etchings, Lithographs, Serigraphs, and Similar Reproductions			
X	05232	Fabric Designs			
X	05240	Masks			
X	05248	Mixed Media			
X	05256	Paintings (Originals)			
X	05264	Photographs			
Х	05272	Posters and Prints (Not Originals)			

EXEMPT	Code	Description			
X	05276	Recycled Art Objects			
X	05280	Sculptures: Marble, Metal, Plastic, etc.			
X	05288	Wood Carvings			
Select Exemptions	232	CRAFTS, GENERAL			
		(Flowers for Teaching Purposes and Commencement			
		Exercises Only)			
X	23227	Dried Flowers and Plants			
X	23232	Floral Arrangements, Artificial			
X	23235	Floral Supplies: Artificial Flowers, Floral Tape, etc.			
Select Exemptions	325	FEED, BEDDING, VITAMINS AND SUPPLEMENTS FOR			
		ANIMALS (SEE CLASS 875 FOR DRUGS AND			
		PHARMACEUTICALS FOR ANIMALS)			
X	32548	Milk Products			
(All 375 Category	375	FOODS: BAKERY PRODUCTS (FRESH)			
Exempt)					
X	37515	Bread, Rolls, etc. (Including Brown and Serve Items)			
		Available on SWC			
X	37530	Cakes, Cookies, and Pastries Available on SWC			
X	37545	Doughnuts, Fried Pies, Bagels Available on SWC			
X	37550	Pastry Shells			
X	37554	Pizzas			
X	37560	Taco Shells and Tortillas			
Select Exemptions	380	FOODS: DAIRY PRODUCTS (FRESH)			
X	38010	Butter			
X	38015				
X	38030	Cottage Cheese			
X	38033	Cream, All Types Desserts, Milk Based (Not Otherwise Classified)			
X	38035				
X	38045	Eggnog and Mix Ice Cream			
X	38050	Ice Milk			
X	38060	Mellorine			
X	38075	Milk, All Types			
X	38080	Sherbet			
X	38085	Toppings, Whipped, Refrigerated			
X	38090	Yogurt			
(All 390 Category	390	FOODS: PERISHABLE			
Exempt)					
X	39002	Aquatic Invertebrates (Octopus, Squid, Anemones, Sea			
	, , , , , , , , , , , , , , , , , , ,	Cucumbers)			
X	39005	Casings, Meat, All Types			
X	39007	Cheese			
X	39015	Dips, Food			
X	39021	Eggs, Fresh			
X	39028	Fruits, Fresh			

EXEMPT	Code	Description			
X	39033	Hors d'oeuvres, meat trays, vegetable trays, dessert trays,			
		etc. for meetings and parties			
X	39035	Ice			
X	39042	Ice, Dry			
X	39049	Meat: Cured, Fresh, and Frozen			
X	39056	Oleomargarine			
X	39063	Poultry, Dressed			
X	39068	Salad Mix, Fresh			
X	39069	Salted or Smoked Foods (Fruit, Meat, Seafood, Nuts, etc.)			
X	39070	Seafood, Fresh			
X	39072	Shellfish, Fresh			
Х	39075	Shortening (Except Vegetable) and Lard			
X	39077	Tamales, Fresh			
X	39084	Vegetables, Fresh			
X	39091	Water, Drinking (Including Distilled)			
Select Exemptions	495	LABORATORY AND FIELD EQUIPMENT AND SUPPLIES:			
		BIOLOGY, BOTANY, GEOLOGY, MICROBIOLOGY, ZOOLOGY,			
		ETC.			
X	49508	Amphibia For Laboratory Research (Preserved)			
X	49512	Animals, Experimental, Not Specially Bred			
X	49513	Animals, Experimental, Not Specially Bred or Selected (e.g.,			
^	49313	Albino Mice and Rats)			
X	49525	Biology Specimens and Cultures (Except Microbial)			
X	49526	Biology Specimens and Cultures (Including Microbial):			
	.3323	Complete Ecosystems, etc.			
X	49530	Botany Specimens			
X	49538	Cultures, Microbial (Living Organism)			
X	49545	Geology Specimens and Collections			
X	49549	Invertebrates and Vertebrates, Preserved			
Х	49554	Insects for Laboratory Research			
X	49578	Reptiles, Preserved			
X	49585	Skeletons: Mounted, Unmounted, and Partial			
X	49595	Zoology Specimens, Live and Injected			
(All 580 Category	580	MUSICAL INSTRUMENTS, ACCESSORIES, AND SUPPLIES			
Exempt)					
X	58002	Accordions and Accessories			
X	58003	Amplified Instruments (Guitars, etc.) and Amplifiers			
X	58005	Band and Choral Risers			
X	58010	Band Instruments and Accessories			
X	58015	Band Room Equipment: Music Cabinets, Stands, etc.			
X	58025	Electronic Musical Instruments: Electronic Organs,			
		Synthesizers, Visualizers, etc.			
X	58030	Metronomes and Tuners, Conventional or Electronic			
(All 580 Category	580	MUSICAL INSTRUMENTS, ACCESSORIES, AND SUPPLIES			
Exempt)		CONT.			

EXEMPT	Code	Description		
X	58034	Music Boxes		
X	58035	Music, Sheet and Folio		
X	58040	Musical Instrument Repair Parts and Supplies (Except Organ		
^	30010	and Piano)		
X	58045	Musical Supplies: Music Holders, Strings, Reeds, etc.		
Х	58055	Organs (Conventional), Accessories, Parts and Supplies		
Х	58060	Pianos, Accessories, Tuning Instruments, Parts and Supplies		
Х	58070	Recycled Musical Instruments, Accessories and Supplies		
Х	58080	Stringed Instruments, Conventional; and Accessories		
Х	58085	Tower Chimes, Accessories, Parts, and Supplies		
Select Exemptions	595	NURSERY STOCK, EQUIPMENT, AND SUPPLIES		
X	59506	Bamboo, Cane, Rattan, Reed, etc.		
Χ	59507	Aquatic Plants		
Χ	59510	Bedding Plants and Cuttings		
X	59515	Bulbs and Seeds		
Χ	59526	Edging, Lawn		
X	59528	Flowers, Fresh (Flowers for Teaching Purposes,		
		Commencement Exercises, Banquets, Conferences,		
		Workshops, etc.)		
X	59533	Grates, Guards, and Other Protective Devices For Trees and		
		Shrubs		
X	59535	Groundcovers and Vines		
X	59537	Horticultural Specialties incl. Ornamental Floriculture		
	F0F40	Products Nursery Creenbayes and Floral Symplical Johnson Blantage		
X	59540	Nursery, Greenhouse and Floral Supplies: Labels, Planters, Pots, Tags, Trellises, etc.		
X	59550	Peat Moss		
X	59552	Perennials		
X	59555	Plant Foods (Not Fertilizer)		
X	59557	Plants, Non-Flowering		
X	59558	Plant Shine		
X	59559	Plants, Herb		
X	59560	Plant Sprayers and Respirators, Plant Propagation Mats,		
^	39300	etc., and Accessories		
X	59561	Plants, Indoor		
X	59565	Shrubbery, Evergreen		
X	59566	Shrubbery, Flowering		
X	59570	Trees, Fruit and Nut		
	59575	Trees, Ornamental and Shade		
X	59577	Tropicals		
Select Exemptions	715	PUBLICATIONS AND AUDIOVISUAL MATERIALS (PREPARED		
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		MATERIALS ONLY, NOT EQUIPMENT, SUPPLIES, OR		
		PRODUCTION)		
V	74500	Tarabasha Adula Edua (1		
X	71583	Textbooks, Adult Education		
X	71584	Textbooks, Special Education		
X	71585	Textbooks: Kindergarten thru 5th Grade (Includes Student		
		and Teacher Editions)		

EXEMPT	Code	Description		
Х	71586	Textbooks: 6th thru 8th Grade (Includes Student and		
^	, 1300	Teacher Editions)		
X	71587	Textbooks: 9th thru 12th Grade (Includes Student and		
		Teacher Editions)		
X	71588	Textbooks: College Level (Includes Student and Teacher		
		Editions)		
Х	71590	Video Cassettes, Disks, Tapes, etc. (For Computer and TV,		
		Prerecorded)		
X	71595	Recycled Publications and Audio-Visual Materials		
(All 855 Category	855	THEATRICAL EQUIPMENT AND SUPPLIES		
Exempt)				
Χ	85515	Costumes and Accessories		
Х	85522	Curtains, Cycloramas, Draperies, Drops, etc.		
Х	85530	Dance Floors, Portable		
X	85543	Lifts, Orchestra (Theater Pit Area)		
X	85544	Lighting and Dimming Controls: Autotransformer Dimmers,		
		Control Panels, Solid State Thyristor/Triac Dimmers, etc.		
Х	85546	Lighting Control Systems: Memory and		
		Computer/Microprocessor Type		
X	85548	Lighting Distribution Hardware: Borderlight Cables, Pipe		
		Battens, Plugging Strips and Boxes, Wall and Floor Pockets,		
		etc.		
X	85550	Lighting Instruments: Border and Cyclorama Striplights,		
		Follow Spotlights, Floodlights, Special Effects Lighting,		
		Spotlights, etc.		
X	85553	Lighting Systems, Complete		
X	85560	Makeup		
X	85568	Scenery and Props		
X	85570	Sound Effects Equipment		
X	85575	Stage Hardware and Supplies: Braces, Canvas, Clamps,		
.,		Paints, etc.		
X	85577	Standards, Portable; and Ropes (For Theater Lobbies)		
X	85580	Stage Rigging and Tracks		
X	85581	Stages, Theatre (All Types)		
X	85588	Turnstiles, Theater		
X	85595	Recycled Theatrical Equipment, Accessories and Supplies		
(All 906 Category	906	ARCHITECTURAL SERVICES, PROFESSIONAL		
Exempt from				
DOAS with exception to OCGA				
50-25 Code (>				
\$75K, Prequalify) X				
y zorty i requality) X				
X	90602	Acoustics; Noise Abatement - Architectural Services		
X	90604	Agricultural Development - Architectural Services		
Χ	90606	Airports (Lighting, Fueling, Navaids) - Architectural Services		

EXEMPT	Code	Description			
X	90607	Architect Services, Professional			
X	90608	Automation; Controls; Instrumentation - Architectural			
		Services			
Х	90610	Buildings - Architectural Design			
Х	90612	Building Sanitation - Architectural Services			
Х	90614	Cemeteries, Planning and Relocation, Architectural Services			
X	90616	Chemical Processing and Storage - Architectural			
Χ	90618	Cold Storage; Refrigeration; Fast Freeze - Architectural			
X	90619	Concrete Architectural Services			
X	90622	Corrosion Control; Cathodic Protection; Electrolysis -			
		Architectural			
X	90624	Desalinization (Process and Facilities) - Architectural			
X	90625	Design Build Services			
X	90626	Electronics - Architectural Services			
X	90627	Energy Management - Architectural			
X	90628	Energy Conservation; New Energy Sources (Solar, etc.) -			
		Architectural Services			
X	90629	Environmental - Architectural			
X	90630	Fire Protection - Architectural Services			
X	90632	Fisheries; Fish Ladders - Architectural			
X	90633	Forensic - Architectural			
X	90634	Freight Handling; Materials Handling - Architectural			
X	90636	Gas Systems (Propane, Natural, etc.) - Architectural			
X	90638	General Construction - Architectural			
X	90640	Graphic Design - Architectural			
X	90642	Harbors; Jetties; Piers; Ship Terminal Facilities - Architectural			
X	90644	Heating; Ventilating; Air Conditioning - Architectural Services			
Χ	90646	Highways; Streets; Airport Pay-Parking Lots - Architectural			
Χ	90648	Historical Preservation			
(All 906 Category	906	ARCHITECTURAL SERVICES, PROFESSIONAL CONT.			
Exempt from					
DOAS with					
exception to OCGA					
50-25 Code (>					
\$75K, Prequalify) X					
	000550				
X	90650	Industrial Processes; Quality Control			
X	90652	Interior Design, Space Planning, and Exhibits/Displays			
X	90654	Irrigation; Drainage; Flood Control - Architectural			
X	90656	Landscape Architecture			
X	90657	Land Development and Planning - Architectural			
X	90658	Lighting (Interior, Exterior) - Architectural Services			
X	90660	Mining and Mineralogy - Architectural			
X	90661	Models of Layouts and Buildings to Scale, Architectural			
X	90662	Petroleum and Fuel (Storage and Distribution) -			
		Architectural			

EXEMPT	Code	Description			
Х	90664	Planning, Urban (Community, Regional, Areawide, and			
		State)			
Χ	90666	Planning, Site (Installation and Project)			
Χ	90668	Power Generation, Transmission, Distribution - Architectural			
Χ	90670	Railroad; Rapid Transit; Monorail - Architectural			
Χ	90672	Recreation Facilities (Parks, Marinas, etc.) - Architectural			
		Services			
X	90674	Recycling Systems - Architectural Design			
Х	90678	Security Systems; Intruder and Smoke Detection -			
		Architectural			
X	90680	Sewage Collection, Treatment, and Disposal - Architectural			
X	90682	Solid Wastes; Disposal Systems - Architectural Services			
X	90684	Telephone Systems - Architectural			
Χ	90688	Towers - Architectural Services			
Χ	90690	Tunnels and Subways - Architectural			
Χ	90692	Utilities (Gas, Steam, Electric) - Architectural			
X	90693	Video Systems Design - Architectural Services			
Х	90694	Water Supply, Treatment and Distribution - Architectural			
(All 907 Category	907	ARCHITECTURAL AND ENGINEERING			
Exempt)					
X	90714	Architectural Services, Non-Licensed (Not Otherwise			
		Classified)			
Χ	90728	Communications Systems; TV; Microwave; Telephone;			
		Computer			
Χ	90735	Designing Services			
X	90738	Drafting Services			
Χ	90740	Engineering Services, Non-Licensed (Not Otherwise			
		Classified)			
X	90742	Geotechnical - Soils			
X	90772	Safety Engineering and Accident Studies; OSHA Studies			
X	90775	Site Assessment and Site Field Observation			
X	90779	Surveying Services (Not Aerial or Research)			
X	90783	Testing Services			
Select Exemptions	915	COMMUNICATIONS AND MEDIA RELATED SERVICES			
X	91502	Advertising (Notice of Bid Solicitation)			
X	91503	Advertising/Public Relations			
X	91504	Advertising, Outdoor Billboard, etc.			
X	91514	Broadcasting Services, Radio			
X	91571	Newspaper and Publication Advertising			
Select Exemptions	918	CONSULTING SERVICES			
Χ	91804	Accounting/Auditing/Budget Consulting			
Χ	91814	Appraisals Consulting			
Χ	91815	Architectural Consulting			
X	91842	Engineering Consulting			
Χ	91874	Legal Consulting			

EXEMPT	Code	Description		
Χ	91878	Medical Consulting		
Select Exemptions	924	EDUCATIONAL SERVICES		
Х	92478	Teaching and Instruction Services (Including Elementary and Secondary Education, Higher Education and Adult Education)		
Select Exemptions	925	ENGINEERING SERVICES, PROFESSIONAL		
X	92504	Agricultural Engineering		
Χ	92517	Civil Engineering		
X	92533	Engineer Services, Professional		
X	92539	Fire Protection Engineering		
X	92586	Surveyor Services, Land		
Select Exemptions	936	EQUIPMENT MAINTENANCE, RECONDITIONING, AND REPAIR SERVICES - GENERAL EQUIPMENT		
X	93680	Theatrical Equipment Maintenance and Repair		
Select Exemptions	946	FINANCIAL SERVICES		
X	94612	Actuarial Services and Retirement Planning		
X	94615	Appraisal Services, Real Estate		
X	94630	Cash/Securities and Bonding Services		
X	94631	Certified Public Accountant (CPA) Services		
Select Exemptions	948	HEALTH RELATED SERVICES (FOR HUMAN SERVICES SEE CLASS 952)		
X	94864	Nursing Services		
Х	94874	Professional Medical Services (Including Physicians and All Specialties)		
X	94876	Psychologists/Psychological Services		
Select Exemptions	952	HUMAN SERVICES		
X	95221	Counseling		
Select Exemptions	953	INSURANCE, ALL TYPES (Not subject to DOAS' authority. DCH handles health insurance and SPA is authorized to handle flexible benefits for state employees.)		
X	95337	Disability		
Х	95348	Health/Hospitalization (Including Dental and Visual Insurance)		
Χ	95363	Life		
Select Exemptions	956	LIBRARY SERVICES (SEE CLASS 908 FOR BOOKBINDING, REBINDING, AND REPAIRING)		
X	95635	Internet Database Subscription		
X	95640	Magazine Subscriptions		
X	95685	Training Material Subscription		
Select Exemptions	961	MISCELLANEOUS PROFESSIONAL SERVICES		

EXEMPT	Code	Description		
X	96147	Law Enforcement Services (Including Process Server		
		Services)		
X	96149	Legal Services, Attorneys		
X	96173	Theatrical Services (Including Production, Scenery Design, Stage, etc.)		
X	96185	Utility Services, Electric, Gas, Water (Except when Customer Choice)		
X	96186	Veterinary Services		
Select Exemptions	962	MISCELLANEOUS SERVICES		
Х	96248	Interior Design/Decorator Services		
Select Exemptions	963	NON-BIDDABLE MISCELLANEOUS ITEMS		
X	96343	Intergovernmental/Inter-Agency Contracts		
Х	96357	Postage Related Purchases (Incl. Postage Stamps, Pre-Sort 1st Class Inscriptions, Postage by Phone for Meters etc.)		
Χ	96348	Membership Dues		
X	96364	Registration Fees		
Select Exemptions	971	REAL PROPERTY RENTAL OR LEASE		
X	97165	Room Rental for Conferences, Seminars, etc.		
Select Exemptions	981	RENTAL OR LEASE OF EQUIPMENT - GENERAL EQUIPMENT		
Х	98174	Theatrical Equipment and Supplies (Including Costumes) Rental or Lease		
Select Exemptions	998	SALE OF SURPLUS & OBSOLETE ITEMS		
X	99844	Food		
	NIGP Code	MULTIPLE NIGP CODES AVAILABLE FOR THE ITEMS BELOW		
X		Direct Resale through a state Agency/Institution operated service i.e. bookstore, cafeteria etc.		
X		Teaching Forms, and Publications for Testing		
X		Contractors for services only to be provided by Non-Profit Entities that comply with the requirements of O.C.G.A. 50-20-1 et seq		

APPENDIX D - EXCEL PIVOT TABLES (EXCEL 2003)

Pivot tables allow you to get different views of data through summarizing in two dimensions – rows that go down and columns that go across.

Any or all of the columns in the original spreadsheet can be reflected as rows, columns, or data in the pivot table to present the information you want in summary form. You are probably already familiar with what one looks like. The table below shows summary sales data from multiple regions for multiple quarters.

	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
Eastern Region	\$10,000	\$15,000	\$12,000	\$13,000
Midwestern Region	\$20,000	\$30,000	\$15,000	\$25,000
Southern Region	\$30,000	\$40,000	\$20,000	\$10,000
Western Region	\$25,000	\$15,000	\$30,000	\$25,000
Totals	\$85,000.00	\$100,000.00	\$77,000.00	\$73,000.00

Behind all of these summary numbers, lie the thousands of individual transactions that make up those amounts. Instead of manually adding up all of those individual transaction amounts, Excel can do it for you.

These exercises are going to use transaction data from the purchasing card and from the PeopleSoft 19D query.

Some Preliminaries

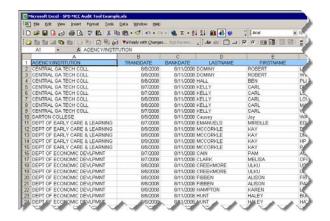
Make sure your data spreadsheet has no gaps or spaces in it. In order for Excel to properly identify the data source, all columns must be contiguous. For example, you cannot create a pivot table from data in columns A-D and columns L-N. The same holds true for rows – you cannot create a pivot table from data in rows 1-10 and 20-30.

All columns of the spreadsheet with the data must have column headings. Excel will not recognize a column as being in the range if there is not one.

A good rule of thumb is that if you don't want to do a calculation on a column, the data should be formatted as text, even if it is a number. For some Excel formulas to work correctly, these fields must formatted as text.

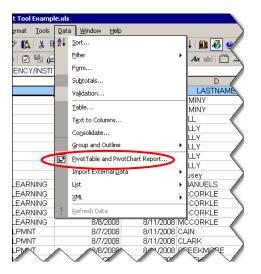
Step #1 – Initiate Pivot Table

The data tab of the workbook has the individual transactions.



Click on

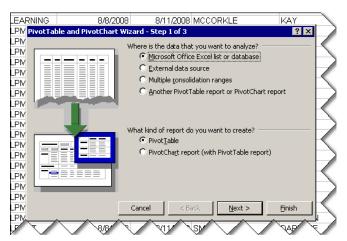
Data→PivotTable and PivotChart Report



<u>Step #2 – Define Type of Pivot</u> Table

You can create a pivot table from external data sources if you want or from multiple spreadsheets. You can also do a pivot table and chart.

Leave the default radio buttons checked (Excel list and pivot table only) and click the **Next** button.



Step #3 – Define Data Range

Excel will identify the range of data on the spreadsheet. Most of the time, you will want to include all of the data in the pivot table. However, you can select the range manually and include just the contiguous columns and rows you want. For example, if you have

data in A1:M2000 but you only want to use data in A1:D200, you can manually select that range. However, in our work, it is highly unlikely that we would want to pivot just part of the data (or data from multiple spreadsheets).

Accept the data range that Excel chose by clicking the **Next** button.

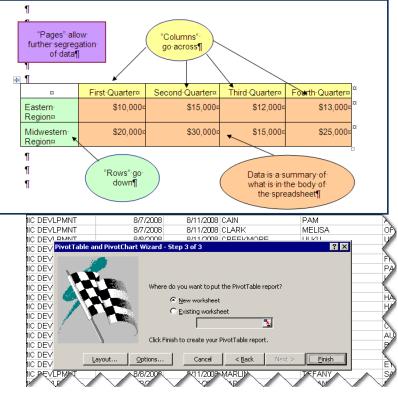


Step #4 – Design the Layout of the Pivot Table

This is the step where you determine what your pivot table will look like and how the data will be summarized. The different areas of a pivot table are:

- **Data** this is the information that you are trying to summarize, or measure, or count.
- Page a "page" is useful if you have a lot of data and you will want to look at only one main group at a time. For example, if you have 100,000 purchasing card transactions at 100 Agencies, it might be easier to review one Agency at a time rather than all Agencies at once.
- Row the "row" determines what columns from the data will be in the left-hand columns of the table. You can have as many rows as you have columns in the spreadsheet of data.
- Column the "column" determines the names of the columns going across the pivot table.

The diagram to the right shows the relationship between rows and columns on the pivot table.



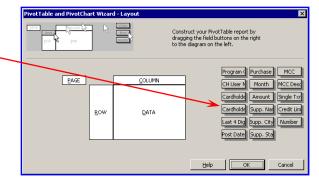
Click the **Layout** button.

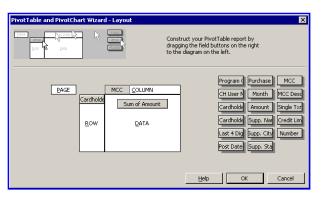
The column names from the data spreadsheet are shown on the right-hand side of the layout box.

Any of the spreadsheet columns can also be put in the "Data" area. The most common use is to present the total of an amount field, such as transaction or purchase order amount.

To present the spreadsheet columns as rows or columns on the pivot table, drag and drop the columns to the "Row" or "Column" areas of the design screen.

The "Page" area would be a good place to put the "Program Name" field in order to be able to filter on one Agency or University at a time. For Compliance audits, the vendor name from the 19D query would be a good candidate for a "Page".



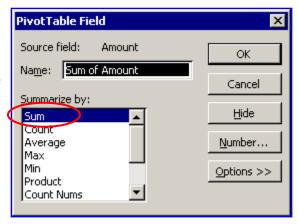


Here, we have put the cardholder name as the rows going down, the Merchant Category Code as the column, and the sum of the transaction amounts as the data. The result will be the amount of spend each cardholder made at merchants assigned to those MCC's.

Step #5 – Formatting the Numbers

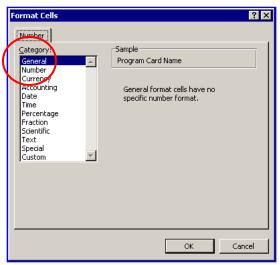
To format the "Sum of Amount" (data) field, doubleclick on the Sum of Amount button in the Data area (circled in the previous diagram).

Most of the time, you will want to choose the Sum of the amount field. There might be times when you want to count the occurrence of the amounts, such as when you want to know how many transactions for \$50.92 we have. This is probably not very useful. However, you might want to count the number of transaction numbers or purchase order numbers.



To format the number (e.g. currency with a \$ sign), click on the **Number...** button on the right side of the dialog box. You can then format the data fields like you would any cells in Excel.

Click the **OK** button in the Format Cells dialog box when finished. Then, click the **OK** button on the PivotTable Field dialog box.



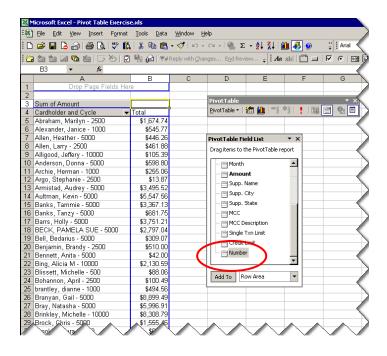
Click the **Finish** button on the Step 3 of 3 dialog box. The pivot table will be on a new spreadsheet in the workbook.



Step #6 – Modifying the Pivot Table

The pivot table will display on the screen. From here, you can remove columns or rows (MCC column added in Step #4 has been removed). You can also drag and drop other spreadsheet columns to rows or columns of the pivot table.

In this spreadsheet, the Number column represents the transaction number. Drag the Number column from the Pivot Table Field List (highlighted and circled in this screen shot) to the Total column until the Total column (with the values) is outlined with a broken line.



The pivot table now displays the Count of Number. The table will automatically display the data fields the way it thinks you want to. Spreadsheet columns that are formatted as numbers or currency will automatically be inserted in the data area as a "sum" of the amount. Text fields will automatically be inserted as "count" of the values. If any of this is not correct, you can change it.

Now, drag and drop the amount column into the data area.

You will now see another Sum of Amount shown as Sum of Amount2.

This kind of summary doesn't make much sense, but you might want to see the largest transaction amount or the smallest transaction amount.

To change the summarize option for the new amount field of the Sum of Amount2, click on the **Field Settings** button on the Pivot Table tool bar (second button from the right).

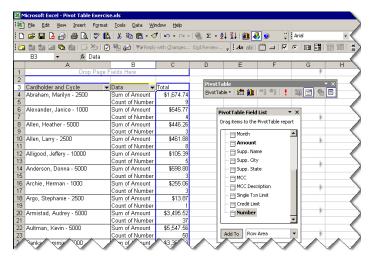
If you don't like the default names, these can be changed in the PivotTable Field dialog box.

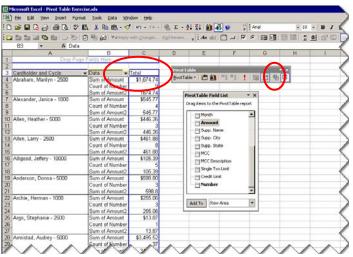
Change the *Max of Amount2* to *Largest Transaction* here.

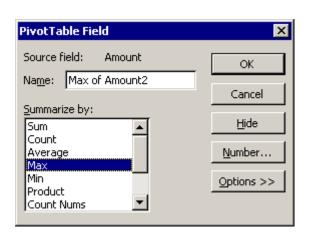
Click on the **Max** option in the **Summarize by:** area. Click on the **Number...** button to format the number as Currency and click **OK**.

Notice that you can also do "average" amount and smallest ("min") amount.

Click **OK** on the PivotTable Field dialog box.

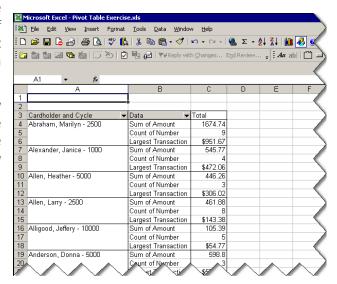






The pivot table now displays the Sum of Amount, the Count of Number, and the Largest Transaction amount for each cardholder.

To view the details behind any number, double-click on the number. Excel will display the individual lines in a new worksheet.



Pivot Table Extras

Filtering a Pivot Table

Drop-down lists for the row values can be used to filter what is shown on the screen. Click the drop-down arrow and select the values to show.

To de-select all, click on the (Show All) box to remove all check marks.

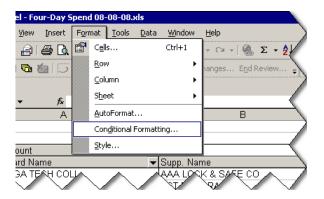
Use the scroll bar to scroll through the list. Click one or more of the check boxes to show the information for that Agency/University and/or Supplier Name and/or any other row labels.

Click **OK** when finished.

Sum of Amount Program Card Name Post D AAA LOCK & SAFE CO (Show All) ACT PROGRAMS CENTRAL GA TECH COLL Amazon.com DARTON COLLEGE 8 9 10 BUMPER TO BUMPER DEPT OF EARLY CARE & L CNT GA TCH MILLEDGEVILLE DMI DELL HIGHER EDUC DEPT OF ECONOMIC DEV ☑ GA 8TH DIST CRTS FISCA FOX APPLIANCE PARTS OF 11 12 13 14 15 16 GA ABAC GA ADMIN OFF OF THE LOWES #00546 GA ALBANY STATE UNIV MEDIBAG CO. GA ALBANY TECH COLLEG MICHAELS #1686 R&S INDUSTRIAL SUPPLY STAPLES ULTIMATE OFFICE WWW GRAINGER 938 19 CENTRAL GA TECH COLL Total

Applying Conditional Formatting

You can apply conditional formatting to a cell or range of cells just like you would in a standard spreadsheet. Click on the cell or the range of cells you wish to apply conditional formatting to.



On the menu bar, click on Format -> Conditional Formatting...

The Conditional Formatting dialog box will appear. In Excel 2003, you can have up to three conditional formats.

Click on **Cell Value Is** in the first drop-down list. (This is the default value.)



Click on a criteria in the second drop-down list depending on what values you want to display.

In this example, we are looking for values greater than a certain dollar amount.

Enter a value in the third drop-down list. In this example, we want to filter on all cells where the value is greater than \$5,000.

Click the **Format...** button to open the Format Cells dialog box. This is the same format box as you would see for regular cell formatting. Select how you want to display the cells. In this example, we want to see the cells highlighted with pink. Click on the pink box (lower left-hand corner).

Click **OK** on both the Format Cells dialog box and the Conditional Formatting dialog box.

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Cells matching the criteria you entered will be displayed in pink.

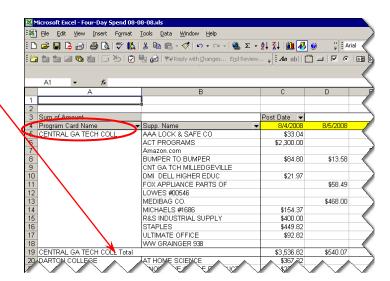


Removing Subtotals

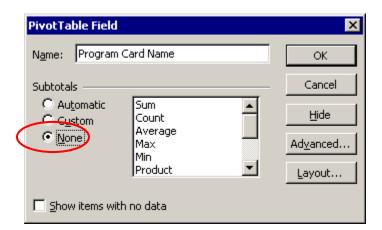
Whenever you put in two or more spreadsheet columns in the "row" area, the pivot table will automatically insert totals for each row.

Sometimes this is helpful, sometimes it is not, especially when you have two or more spreadsheet columns represented as rows. To eliminate the subtotals, double-click on the section that has the subtotals. In this illustration, that

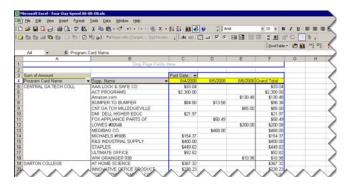
would be the Card Program Name row section.



To remove the subtotals, click on the "None" radio button and click **OK**.

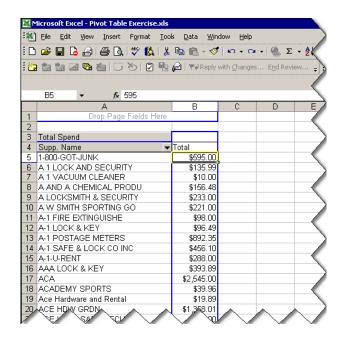


This looks neater, especially if the subtotals for the agency are not that important.



Sorting a Pivot Table

Sorting a pivot table is not quite the same as sorting a regular spreadsheet. The table automatically sorts by the row values. However, we might want to view our data in descending order by amount to see which vendor has the most spend.

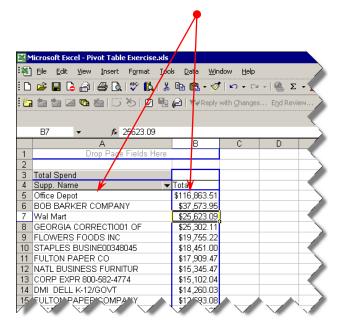




To sort the pivot table by the amount, click anywhere in the Total column. Click **Data Sort...** on the menu bar. The pivot table Sort dialog box will appear.

Click on the "Value" radio button if not already clicked and choose Descending.

Click **OK** to return to the pivot table. The values will be sorted in descending order by amount. The labels automatically sort correctly.



APPENDIX E - EXCEL PIVOT TABLES (EXCEL 2007)

Pivot tables allow you to get different views of data by summarizing in two dimensions – rows that go down and columns that go across.

Any or all of the columns in the original spreadsheet can be reflected as rows, columns, or values in the pivot table to present the information you want in summary form. You are probably already familiar with what one looks like. The table below shows summary sales data from multiple regions for multiple quarters.

	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
Eastern Region	\$10,000	\$15,000	\$12,000	\$13,000
Midwestern Region	\$20,000	\$30,000	\$15,000	\$25,000
Southern Region	\$30,000	\$40,000	\$20,000	\$10,000
Western Region	\$25,000	\$15,000	\$30,000	\$25,000
Totals	\$85,000.00	\$100,000.00	\$77,000.00	\$73,000.00

Behind all of these summary numbers, lie the thousands of individual transactions that make up those amounts. Instead of manually adding up all of those individual transaction amounts, Excel can do it for you.

These exercises are going to use purchasing card transaction data.

Some Preliminaries

Make sure your data spreadsheet has no gaps or spaces in it. In order for Excel to properly identify the data source, all columns must be contiguous. For example, you cannot create a pivot table from data in columns A-D and columns L-N. The same holds true for rows – you cannot create a pivot table from data in rows 1-10 and 20-30.

All columns of the spreadsheet with the data must have column headings. Excel will not recognize a column as being in the range if there is not one.

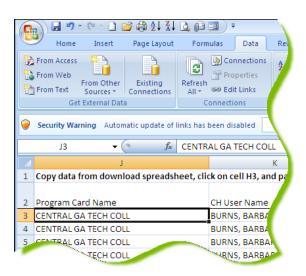
A good rule of thumb is that if you don't want to do a calculation on a column, the data should be formatted as text, even if it is a number. For some Excel formulas to work correctly, these fields must formatted as text.

Step #1 – Initiate Pivot Table

The examples that follow use purchasing card transaction data. The data tab of the workbook has the individual transactions. You can click anywhere in the data range and Excel will identify the data to be used.

Click on

Insert → Pivot Table



Step #2 – Define Data Range & Location of Pivot Table

Excel will identify the range of data on the spreadsheet. Most of the time, you will want

to include all of the data in the pivot table. However, you can select the range manually and include just the contiguous columns and rows you want. For example, if you have data in A1:M2000 but you only want to use data in A1:D200, you can manually select that range. However, in our work, it is highly unlikely that we would want to pivot just part of the data (or data from multiple spreadsheets).

Click the radio button for either "New Worksheet" or "Existing Worksheet". The default setting is "New Worksheet" and you will use this option most of the time. The other option is helpful if you want to

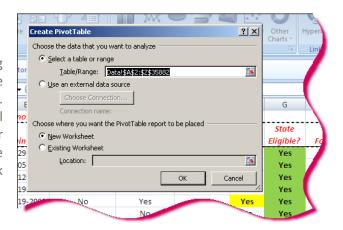


have multiple pivot tables in a single workbook either on multiple data tabs or on the same data.

Click OK.

Excel Extra

To place the pivot table on an existing worksheet, click on the radio button and the red arrow at the end of the "Location" box. Navigate to the spreadsheet and the cell location (not just to the particular spreadsheet) where you want to put the table. Hit "Enter" and Excel will take you back to this dialog box. Click **OK**.

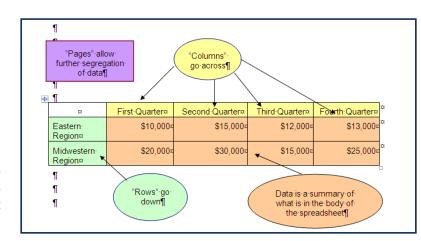


Step #3 – Design the Layout of the Pivot Table

This is the step where you determine what your pivot table will look like and how the data will be summarized. The different areas of a pivot table are:

- Values (fka Data) this is the information that you are trying to summarize, or measure, or count.
- Report Filters (fka Page) a "Report Filter" is useful if you have a lot of data and you
 will want to look at only one main group at a time. For example, if you have 100,000
 purchasing card transactions at 100 Agencies, it might be easier to review one
 Agency at a time rather than all Agencies at once.
- Row the "row" determines what columns from the data will be in the left-hand columns of the table. You can have as many rows as you have columns in the spreadsheet of data.
- Column the "column" determines the names of the columns going across the pivot table.

The diagram to the right shows the relationship between rows and columns on the pivot table. What was called "Pages" in Excel 2003 (see purple box) is now called "Report Filters" in Excel 2007.



The pivot table layout screen is slightly different from that in Excel 2003. It has built-in formatting for Rows. To see the layout screen in the Excel 2003 version, click on "Options" in the top left-hand corner. Click on the "Display" tab and the "Classic Pivot Table layout" check box. Then click **OK**.

The column names (Pivot Table Field List) from the data spreadsheet are shown on the right-hand side of the screen.

To put any column in the Row Labels section, click on the box next to the column name. The rows will appear in the Row Labels box in the order shown in the list. If you want to re-arrange them, you can "drag and drop" the fields in that section into the desired order. You can also drag and drop field names to any of the areas shown instead of clicking on



□ Classic PivotTable layout (enables dragging of fields in the graph of the control of the

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the box.

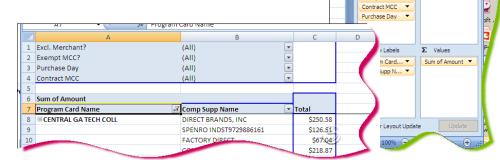
Any of the spreadsheet columns can also be put in the "Values" area. The most common use is to present the total of an amount field, such as transaction or purchase

order amount. If Excel detects a numeric column, it should automatically choose the Sum of that amount for the Value. For any non-numeric columns, Excel defaults to Count of the rows.

The "Report Filter" area would be a good place to put the "Program Name" field in order to be able to filter on one Agency or University at a time. For Compliance audits, the vendor name from the 19D query would be a good candidate for a "Report Filter".

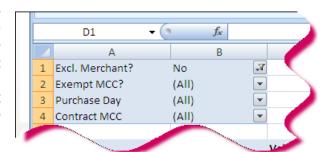
Here, we have put the State Entity name and the vendor name, in that order, as the rows going down and the sum of the transaction amounts as the data. The total in column C will be the amount of spend for the State Entity (column A) at the merchant (column B).

The Report Filters will be above the pivot table to allow filtering.



When using the Report Filters, only data rows that match ALL of the values selected in the filters will display. For example, in the illustration here, records where the merchant has been identified as "Excluded" from review, regardless of whether or not the MCC is exempt (because of the probable NIGP code), regardless of the day of the week on which the purchase was chosen, and regardless of whether or not there is a contract merchant with the same MCC.

As another example, applying the filters as shown here will pull all transactions at merchants where (1) the merchant has not been excluded and (2) the MCC is not exempt because of the probable NIGP code.



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Column Labels

PivotTable Field List

▼ Excl. Merchant?

✓ Program Card Nar

☐ CH User Name
☐ Last 4 Digits

☐ Comp Supp Street 1 ☐ Comp Supp City

Report Filter

Excl. Merchant? TExempt MCC?

Drag fields between areas below

✓ Exempt MCC?
✓ Contract MCC

□Level III □State Eligible

✓ Amount

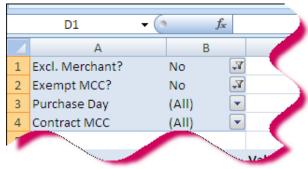
□ Purchase Date

☐ Post Date

✓ Comp Supp Name

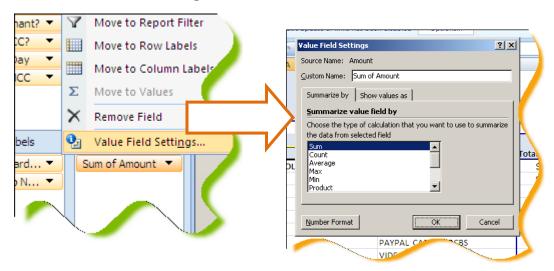
☐ Focus ☐ Spend Group

Choose fields to add to report:



Step #4 – Formatting the Numbers

Click on the "Sum of Amount" button in the Values area. When the pop-up menu appears, click on "Value Field Settings...".



Most of the time, you will want to choose the Sum of the amount field. Click on the "Number Format" button to select the format (e.g. General or Currency).

Click the **OK** button in the Value Field Settings dialog box when finished.

Excel Extra:

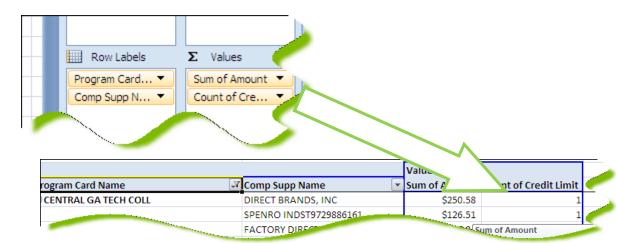
There might be times when you want to count the occurrence of the amounts, such as when you want to know how many transactions for \$50.92 we have. This is probably not very useful. However, you might want to count the number of transaction numbers or purchase order numbers.

Step #5 – Modifying the Pivot Table

The pivot table will display on the screen. From here, you can remove columns or rows. You can also drag and drop other spreadsheet columns to rows or columns of the pivot table.

Drag the "Credit Limit" field to the Values area. Notice that the default is "Count" of the Credit Limit. Excel assumes that you want to count the number of rows with something in this field. In this example, it will count the number of rows for each merchant name. In this spreadsheet, the Number column represents the transaction number. You can use a "count" of any field to determine the number of data rows associated with the field names shown in the Row Labels area.

The pivot table now displays the Count of Credit Limit. The table will automatically display the data fields the way it thinks you want to. Spreadsheet columns that are formatted as numbers or currency will automatically be inserted in the data area as a "sum" of the amount. Text fields will automatically be inserted as "count" of the values. If any of this is not correct, you can change it. See diagram at top of next page.



Now, delete the Credit Limit field from the Values area and drag and drop the amount column into the data area.

You will now see Count of Amount. This kind of summary doesn't make much sense, but you might want to see the largest transaction amount or the smallest transaction amount.

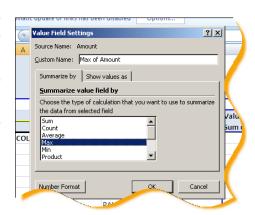
To change the summarize option for the additional amount field, click on the **Max** option in the **Summarize by:** area. Click on the **Number...** button to format the number as Currency and click **OK**.

Notice that you can also do "average" amount and smallest ("min") amount.

You will now see the Total Amount of spend at the merchant as well as the largest transaction at the same merchant.

If you don't like the default names, these can be changed in the PivotTable Field dialog box.

Change the *Max of Amount* to *Largest Transaction* here.



In this example, the total spend and the largest transaction were the same for Marvair QPS, so there must have been just one transaction. However, the total spend at Sherwin Williams was \$377.77 with the largest transaction being \$176.69.

To view the details behind any number, double-click on the number. Excel will display the individual lines in a new worksheet.

ſ	EOWES 1101044	9210.7 4	Ş1 4 0.10	
l	MARVAIR QPS	\$49.47	\$49.47	-
I	SHERWIN WILLIAMS	\$377.77	\$176.69	***
	PD-PARTS		\$50.73	- 🥞
			+700.00	

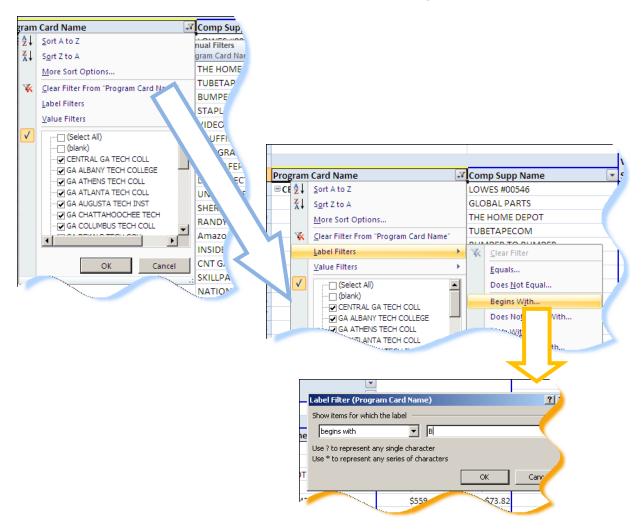
Pivot Table Extras

Filtering a Pivot Table

Drop-down lists for the Report Filters, Column Labels, and Row Labels areas can be used to filter what is shown on the screen just like using filters on a standard spreadsheet. Click the drop-down arrow and select the values to show.

Note that you can also begin a sort on the column from this option.

To apply custom filters, click on the Label Filters bar and then use one of the custom options. This will save time if you have a long list of values and you know that a lot of them begin with the same letter or word. For example, you can select "Begins With..." and enter the letter "B" to see all values in the Row Label that begin with the letter "B".



Applying Conditional Formatting

You can apply conditional formatting to a cell or range of cells just like you would in a standard spreadsheet. Click on the cell or the range of cells you wish to apply conditional formatting to.

On the Home tab, click on Conditional Formatting...

The Conditional Formatting drop-down menu will appear. In Excel 2003, you can have up to three conditional formats. However, in Excel 2007, you can apply more than this.

apply more than this.

Select Manage Rules.....



Select "New Rule"

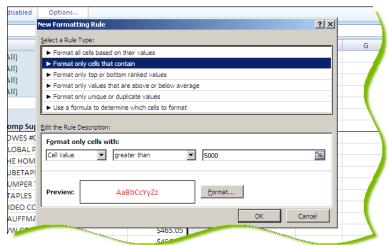
Click on "Format only cells that contain" and enter the criteria and desired format in the dialog box. Click **OK** when finished. In this example, cells containing a value greater than

\$5,000 will be in red font.



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• 0 .00 Condition



To add additional conditional formatting, repeat the above steps for all desired formatting.

Removing Subtotals

Whenever you put in two or more spreadsheet columns in the "row" area, the pivot table will automatically insert totals for each row.

Sometimes this is helpful, sometimes it is not, especially when you have two or more spreadsheet columns represented as rows. To eliminate the subtotals, right-click on the Row Label that has the subtotals. In this illustration, that would be the Program Card Name row section.

To remove the subtotals, click on the "Subtotal..." bar to toggle the subtotals off. To reinstate the subtotals, simply right-click on the Row Label name and click on the "Subtotal..." bar.



Sorting a Pivot Table

Sorting a pivot table is not quite the same as sorting a regular spreadsheet. The table automatically sorts by the row values. However, we might want to view data in descending order by amount to see which vendor has the most spend.

To sort the pivot table by the amount, click anywhere in the Total column. Click the **Data** tab and **Sort...** on the menu bar. The pivot table Sort dialog box will appear.

Click on the "Smallest to Largest" or "Largest to Smallest" radio button.

Click \mathbf{OK} to return to the pivot table. The Row Labels will be sorted in the selected order by amount. The labels automatically sort correctly.

You might also want to sort the pivot table by merchant name. Click anywhere in the merchant name column and click **Data > Sort.** A different dialog box will display. Click on the radio button for either "Ascending" or "Descending" and select the field to sort in the drop-down list. The choices will be the column that you have clicked in on the pivot table and the Value fields (e.g. Sum of Amount).

