

Appendices

Appendix A: Recipe Analysis

Appendix B: Using Column 6 for Recipe Analysis

Appendix C: The USDA Child Nutrition Labeling Program

Appendix D: Food Purchasing: A Summary of First Choice
and Choice Plus

Appendix E: Resources

A

Recipe Analysis

A

Recipe Analysis

How to Use the Recipe Analysis Worksheet

1. The recipe analysis worksheet (Figure 1, page A-7) has been added to the *Food Buying Guide* as a tool to help you calculate the contributions of ingredients towards the meat/meat alternates, vegetables/fruits, and/or grains/breads components of the meal pattern requirements. Determining the contributions your recipes (either USDA modified or locally produced) make towards the meal pattern requirements is an important step in ensuring the meals you serve are nutritious and meet Federal meal pattern requirements.
2. A calculator is most helpful when working with decimals. To determine the contribution a recipe's ingredients make toward meal pattern requirements, you must follow several steps. To illustrate the procedures, a worksheet has been completed for Spaghetti with Meat Sauce (Figure 2), Beef and Spaghetti Casserole (Figure 3), Beef Stew (Figure 4), and Cooked Oatmeal with Raisins and Crunchy Wheat Germ (Figure 5). The Spaghetti with Meat Sauce example uses large quantities of food typically used in a school setting (100 portions). The Beef and Spaghetti Casserole recipe uses a smaller quantity of food often seen in a day care setting (25 portions). The Beef Stew recipe is for 50 portions. The Cooked Oatmeal with Raisins and Crunchy Wheat Germ example (100 portions) uses the serving size required for the School Breakfast Program.
3. Keep in mind the rounding rule used when calculating the *credit* for meal pattern components. For *crediting purposes*, you need to round down to ensure that each portion served provides the minimum amount of credit you are claiming. This is different for the rounding rule used when calculating *how much food to purchase and/or prepare*. The rounding rule used for *purchasing and/or preparing food* is to round up to ensure enough food is purchased and/or prepared.



Recipe Name. Record the name of the recipe at the top of the page.

Portions per Recipe. Record the number of portions your recipe will yield.

Column 1 - Ingredients. List the recipe ingredients in Column 1 of the worksheet. It is not necessary to list ingredients that do not contribute towards meal pattern requirements. Record a description of each ingredient as precisely as possible. For example, record “ground beef, no more than 20 percent fat” or “spaghetti, dry” if these are the exact ingredients called for in the recipe. It is a good idea to group ingredients together that contribute to the same meal component: list all the meat/meat alternates ingredients first, list all the vegetables/fruits ingredients next, then list all the grains/breads ingredients.

Column 2 – Quantity of Ingredient as Purchased. Record the “as purchased” weight or volume measure of each ingredient in the recipe in Column 2 of the worksheet. Convert ounces to their decimal equivalent of a pound. (see “Decimal Weight Equivalents” Table 5 on page I-36) **The quantity specified in Column 2 of the worksheet must be in the same units as the purchase unit which will be recorded in Column 3.** For example, if 2 No. 10 cans of peas are recorded in Column 2, make sure the purchase unit in Column 3 is a No. 10 can also.

Special Considerations for Column 2:

- When the recipe calls for the prepared/ready-to-use form of an ingredient, and the *Food Buying Guide* does not provide yield data for that form, you will have to convert the weight of that ingredient to its unprepared weight in order to determine how many servings are provided by that ingredient.

If the recipe calls for food in a certain form and if yield data for the food in the same form is available in this guide as described in Column 1, conversion of the weight is not necessary. For example, if your recipe calls for onions, fresh, peeled, and diced, no conversion is necessary since the *Food Buying Guide* provides yield data for onions, fresh, diced, ready-to-use as described in Column 1 (see page 2-51).

However, if the form of the food used in the recipe is not listed in Column 1 of the *Food Buying Guide*, conversion of the ingredient weight is necessary. For example, if the recipe calls for eggplant, raw, pared, cubed, a conversion of the ingredient weight is needed since the *Food Buying Guide* only provides data for whole eggplant as described in Column 1. In other words, in order to determine the number of 1/4-cup servings provided by the amount of raw, pared, cubed eggplant in the recipe, you must determine the weight of the whole unpared eggplant (the “as purchased” weight) so that you can then use the yield data in this guide.

- To convert the weight from the prepared/ready-to-serve form to the as-purchased weight, divide the weight of the prepared/ready-to-serve ingredient given in the recipe by the corresponding yield factor provided in Column 6 (Additional Yield Information) of the *Food Buying Guide*.

The resulting answer will be entered in Column 2 of the worksheet. Do not round up.

For example, a recipe calls for 10 pounds of raw, pared, cubed eggplant, but the *Food Buying Guide* only provides yield data for whole eggplant. In this case, the weight of the raw pared, cubed eggplant in the recipe needs to be converted to the weight of the whole eggplant in order to record in Column 2, the amount of whole eggplant that will provide the amount of pared, cubed eggplant required for the recipe. To convert the weight of raw, pared, cubed eggplant to the weight of the fresh whole eggplant, divide 10 pounds of raw, pared cubed eggplant by the yield factor in Column 6 (which is 0.81). The calculation is as follows: 10 divided by 0.81 = 12.34. You would record 12.34 pounds of fresh whole eggplant in Column 2 of the Recipe Analysis Worksheet, and you would then record that whole eggplant yields 6.7 1/4-cup servings of cooked vegetable cubes per pound in Column 4 of the Recipe Analysis Worksheet.

- For additional examples using Column 6 yield data, see calculation examples from Method 3 on pages I-63 through I-65. You may also refer to Appendix B for another example of determining yields of prepared/ready-to-serve ingredients.

Column 3 – Purchase Unit. Record the purchase unit in which you buy the ingredient such as pound, No. 10 can, dozen, etc., in Column 3 of the worksheet. Keep in mind that it is important to use the same purchase unit of the ingredient as specified under “Purchase Unit,” Column 2 of the *Food Buying Guide*.

Column 4 – Servings per Purchase Unit. Record the number of servings per purchase unit of the ingredient in Column 4 of the worksheet. This information will be found in Column 3 of the *Food Buying Guide*. The number of servings per purchase unit varies for different preparation methods or forms of the ingredient as served. Therefore, you should pay particular attention to the description of the food as served when selecting the number of servings per purchase unit to use in the calculations. The description of the form of the food should be most nearly like that of the food *after* preparation of the recipe is complete and as it is served. For example, if a recipe specifies raw, sliced carrots as an ingredient and the carrots are cooked in the process of preparing the recipe, use the information in Column 3 of the *Food Buying Guide* for cooked sliced carrots.

Special Considerations for Column 4:

For a grains/breads ingredient you will need to be aware of the two different ways the serving data are provided in the yield tables:

1) **By number of grains/breads servings**

Most grains/breads items, such as crackers, taco shells, and bread, provide yield data by number of grains/breads servings, for example, 1/2 serving, 1 serving, or 1-1/2 servings. If the ingredient you are using provides the yield data by number of servings, *the purchase unit you need to record in Column 4 of the Recipe Analysis Worksheet must be the yield data for 1 serving of grains/breads.*

2) **By volume**

Items categorized as cooked cereal grains, pasta, rice, and wild rice are listed by portions of a cup, for example, 1/4 cup, 1/2 cup, or 3/4 cup. If the ingredient you are using provides the yield data by fractions of a cup, you need to:

- A) *Know the total number of servings needed using one specific volume measurement.* For example, if you need 50 1/4-cup servings plus 50 1/2-cup servings you will need either a total of 150 1/4-cup servings or 75 1/2-cup servings;
- B) *Choose one volume measurement and use the corresponding yield data for that specific volume measurement.* For example, if the ingredient is barley and you have calculated the number of 1/2 cup servings needed for all servings combined, “pound” will be recorded in Column 3 and 21.2 is recorded in Column 4 since this yield data corresponds to the 1/2 cup serving of cooked barley;
- C) *Understand that the servings per portion will be in units of the specific volume measurement that you have chosen in step B.* As in the example above for barley, the portion chosen is 1/2 cup, the yield data needed to calculate the number of servings corresponds to 1/2 cup, therefore, the answer will be in 1/2 cup servings of grains/breads.

Note: You will need to know what volume portion will provide one grains/breads serving for your program. According to Exhibit A (see pages 3-15 & 3-16), for cooked cereal grains, pasta, rice and wild rice, one grains/breads serving = 1/2 cup cooked. However, there is an exception: For the School Breakfast Program for Grades K-12, one grains/breads serving = 3/4 cup or 1 ounce cereal. This means 3/4 cup or 1 ounce (whichever is less) of cold dry cereal or 3/4 cup cooked cereal is equivalent to one grains/breads serving.

Column 5 – Calculation of the **meat/meat alternates** contribution per serving. Follow these steps:

1. For each meat or meat alternate ingredient in the recipe, multiply the number recorded in Column 2 by the number recorded in Column 4. (Column 2 X Column 4 = Column 5.) Record the answer to two decimal places.

Note: When whole eggs are an ingredient in a recipe, the number entered in Column 4 of the worksheet, servings per purchase unit (obtained from Column 3 of the Food Buying Guide), should be 24 one-ounce servings per dozen large eggs. This is necessary so that the Column 5 entry will be in units of one-ounce servings.

2. If more than one meat or meat alternate ingredient is used in the recipe, add all the numbers recorded in Column 5 to determine the total ounces of meat or meat alternate ingredients in the recipe. Then record the sum in the space provided for the total.
3. Divide the total of Column 5 by the number of portions the recipe yields to determine the contribution per portion.
4. Round down to the nearest 1/4 ounce (0.25 oz).

Note: The contribution that meat or meat alternate ingredients make toward meal pattern requirements is expressed as ounces of “equivalent meat/meat alternate.” The minimum equivalent meat or meat alternate provided by a portion of the recipe must be 0.25 ounce to be credited as a meat/meat alternate contribution.

Column 6 – Calculation of the **vegetables/fruits** contribution per serving. Follow these steps:

1. For each vegetable or fruit recipe ingredient on the worksheet, multiply the number recorded in Column 2 by the number recorded in Column 4. (Column 2 X Column 4 = Column 6) Record the answer to two decimal places.
2. If more than one vegetable or fruit ingredient is used in the recipe, add all of the numbers recorded in Column 6 to determine the total number of 1/4 cup vegetable/fruit servings in the recipe. Then, record the sum in the space provided for the total.
3. Divide the total number of 1/4 cup servings by 4 to convert to cups.
4. Divide the total number of cups by the number of portions the recipe yields to determine the contribution per portion.
5. Record the answer to two decimal places and convert decimal places to the nearest portion of a cup by using table 7 on page I-37. Vegetable/fruit servings are always rounded down to the nearest 1/8 cup.

Note: A recipe must provide a minimum of 1/8 cup vegetable or fruit per serving to count toward the vegetable/fruit component of the meal pattern requirements.

Column 7 – Calculation of the **grains/breads** contribution per serving. Follow these steps when using an item having yield data in the FBG:¹

1. For each grains/breads recipe ingredient listed on the worksheet, multiply the number recorded in Column 2 by the number recorded in Column 4. (Column 2 X Column 4 = Column 7.) Record the answer to two decimal places.
2. If more than one grains/breads ingredient is used in the recipe, add all the numbers recorded in Column 7 to determine the total number of grains/breads servings in the recipe. Record the sum in the space provided for the total.
3. Divide the total figure in Column 7 by the number of portions the recipe yields to determine the contribution per portion.
4. Round down to the nearest 1/4 grains/breads serving.

Totals: The totals row is used to record the sum or total for the numbers recorded in each component column. For example, all the numbers recorded in Column 5, meat/meat alternates, should be added together and the sum will be recorded in the “totals” space of Column 5. Add the numbers recorded in Columns 6 and 7 the same way and the *sums* or *totals* will be recorded in the appropriate column in the space provided for the total.

Portions per Recipe: Record the total number of portions a recipe provides or yields. This number will be the same for each of the component columns. For example, if your entire recipe provides 100 portions, 100 will be entered in this row for Columns 5, 6 and 7.

Calculations: Note the numbers you will use to calculate or determine the contribution of each component.

*Note: Always **round down** after determining the **creditable amount** of a meal pattern component. This is to ensure that each portion served will provide the minimum contribution towards meal pattern requirements. When rounding down, sometimes there may be a little bit more credit than what is claimed. It is necessary to round down so that there will never be less credit than what is claimed. (Keep in mind, when calculating how much food to purchase you would not round down, but would round up.)*

Each Portion Contributes: This row provides a space to record the final rounded down, calculated answers of how one portion will credit towards each meal pattern component.

¹For either *locally produced grains/breads items* or for *items not having yield data in the FBG* that only contribute towards the grains/breads component, see section 3 Grains/Breads, pages 3-8 through 3-16 for determining serving size for a creditable item instead of using this worksheet.

Recipe Analysis Worksheet

FIGURE 1

Recipe Name: _____ Portions per Recipe: _____

Ingredients (1)	Quantity of Ingredient As Purchased (number of purchase units) (2)	Purchase Unit (3)	Servings per Purchase Unit in Food Buying Guide (4)	Meat/ Meat Alternates (ounces) (5) = (2) X (4)	Vegetables/ Fruits (1/4 cup) (6) = (2) X (4)	Grains/ Breads (servings) (7) = (2) X (4)		
Notes: · oz to lb conversion chart is on page I-36 · remember to convert ready-to-use products to their “as purchased” amount (see examples in Method 1, pages I-51 through I-59) · the values for Columns 5, 6, & 7 are found by multiplying the value in Column 2 by the value in Column 4. · remember to divide the total 1/4 cup servings of vegetables/fruits by 4 to get the cups of fruit. · grains/breads in portions of a cup: convert all needed servings into the same portion of a cup and use the corresponding yield data for that same size · grains/breads in numbers of servings: use the yield data provided for 1 grains/breads serving				Totals		(1/4 c)		
				Portions per Recipe				
				Calculations		total ÷ by # portions	total ÷ by 4 (to get units in cups), then ÷ by # portions	total ÷ by # portions
				This Recipe provides _____ portions.	Each Portion Contributes		oz meat/meat alternates	cup(s) vegetables/ fruits

Completed Recipe Analysis Worksheet—School Lunch (100 Portions)

FIGURE 2

Recipe Name: Spaghetti with Meat Sauce Portions per Recipe: 100

(Modified USDA Recipe #D-35)

Ingredients (1)	Quantity of Ingredient As Purchased (number of purchase units) (2)	Purchase Unit (3)	Servings per Purchase Unit in Food Buying Guide (4)	Meat/ Meat Alternates (ounces) (5) = (2) X (4)	Vegetables/ Fruits (1/4 cup) (6) = (2) X (4)	Grains/ Breads (servings) (7) = (2) X (4)	
Ground Beef, (no more than 16% fat)*	14.37 lb (14 lb 6 oz)	Pound	11.8 (for 1 oz serv)	169.56			
Cheddar Cheese,* shredded	2 lb	Pound	16.0 (for 1 oz serv)	32.00			
Onions, fresh, as purchased (to provide 6 lb chopped)	6.88 lb (6 lb 14 oz)	Pound	7.90 (for 1/4 c serv)		54.35		
Tomato Paste	3.50 lb (3 lb 8 oz)	Pound	27.6 (for 1 tbsp)		96.60		
Tomatoes, canned, diced With liquid	8.50 lb (8 lb 8 oz)	Pound	7.71 (for 1/4 c serv)		65.53		
Spaghetti, regular, dry, broken ²	9.50 lb (6 lb 8 oz)	Pound	10.6 (for 1/2 c serv)			100.70	
* the use of 16% fat ground beef and the addition of cheese are modifications to the original USDA recipe # D-35.							
Notes: • oz to lb conversion chart is on page I-36 • remember to convert ready-to-use products to their “as purchased” amount (see examples in Method 1, pages I-51 through I-59) • the values for Columns 5, 6, & 7 are found by multiplying the value in Column 2 by the value in Column 4. • remember to divide the total 1/4 cup servings of vegetables/fruits by 4 to get the cups of fruit. • grains/breads in portions of a cup: convert all needed servings into the same portion of a cup and use the corresponding yield data for that same size • grains/breads in numbers of servings: use the yield data provided for 1 grains/breads serving				Totals	201.56	216.48 (1/4c)	100.70
				Portions per Recipe	100	100	100
				Calculations	201.56 ÷ 100 = 2.01 rounds down to 2.00 oz	216.48 ÷ 4 = 54.12 cups 54.12 ÷ 100 = 0.54 cup rounds down to 0.50 (1/2) cup	100.70 ÷ 100 = 1.00 serving ² <i>(in this case 1 G/B serving = 1/2 cup)</i>
This Recipe provides 100 portions.				Each Portion Contributes	2.00 oz meat/meat alternates	1/2 cup vegetables/ fruits	1 serving grains/ breads

² According to Exhibit A (see pages 3-15 & 3-16), 1/2 cup of cooked pasta is equivalent to 1(one) grains/breads servings. The yield data for the pasta used in this example corresponds to 1/2 cup servings, therefore the answer is in units of 1/2 cup servings (1 grains/breads serving).

Completed Recipe Analysis Worksheet—Child Care (25 Portions)

FIGURE 3

Recipe Name: Beef and Spaghetti Casserole Portions per Recipe: 25

(Modified USDA Recipe #D-22)

Ingredients (1)	Quantity of Ingredient As Purchased (number of purchase units) (2)	Purchase Unit (3)	Servings per Purchase Unit in Food Buying Guide (4)	Meat/ Meat Alternates (ounces) (5) = (2) X (4)	Vegetables/ Fruits (1/4 cup) (6) = (2) X (4)	Grains/ Breads (servings) (7) = (2) X (4)	
Ground beef, (no more than 20% fat)*	3.25 lb (3 lb 4 oz)	Pound	11.8 (for 1 oz serv)	38.35			
Onions, fresh, as purchased (to provide 0.34 lb chopped)	0.43 lb (7 oz)	Pound	7.90 (for 1/4 c serv)		3.39		
Tomato paste	1.12 lb (1 lb 2 oz)	Pound	27.6 (for 1 Tbsp)		30.91		
Spaghetti, dry ³ broken in quarters	1.25 lb (1 lb 4 oz)	Pound	10.6 (for 1/4 c serv)			13.25	
* the use of 20% fat ground beef is a modification to the original USDA recipe # D-22.							
Notes: • oz to lb conversion chart is on page I-36 • remember to convert ready-to-use products to their “as purchased” amount (see examples in Method 1, pages I-51 through I-59) • the values for Columns 5, 6, & 7 are found by multiplying the value in Column 2 by the value in Column 4. • remember to divide the total 1/4 cup servings of vegetables/fruits by 4 to get the cups of fruit. • grains/breads in portions of a cup: convert all needed servings into the same portion of a cup and use the corresponding yield data for that same size • grains/breads in numbers of servings: use the yield data provided for 1 grains/breads serving				Totals	38.35	34.30 (1/4 c)	13.25
				Portions per Recipe	25	25	25
				Calculations	38.35 ÷ 25 = 1.53 rounds down to 1.50 oz	34.30 ÷ 4 = 8.57 cups 8.57 ÷ 25 = 0.34 cup rounds down to 0.25 (or 1/4) cup	13.25 ÷ 25 = 0.53 rounds down to 0.50 (1/2) serving ³ (in this case 1/2 G/B serving = 1/4 cup)
This Recipe provides 25 portions.				Each Portion Contributes	1.50 oz meat/meat alternates	1/4 cup vegetables/fruits	1/2 serving grains/breads

³ According to Exhibit A (see pages 3-15 & 3-16), 1/2 cup of cooked pasta is equivalent to 1(one) grains/breads serving. The yield data for the pasta used in this example corresponds to 1/2 cup servings, therefore, the answer is in units of 1/2 cup servings (1 grains/breads serving). Since one grains/breads serving is 1/2 cup, half of that is equal to 1/4 cup of cooked pasta.

Completed Recipe Analysis Worksheet

FIGURE 4

Recipe Name: Beef Stew

Portions per Recipe: 50

(Modified USDA Recipe #D-14)

Ingredients (1)	Quantity of Ingredient As Purchased (number of purchase units) (2)	Purchase Unit (3)	Servings per Purchase Unit in Food Buying Guide (4)	Meat/ Meat Alternates (ounces) (5) = (2) X (4)	Vegetables/ Fruits (1/4 cup) (6) = (2) X (4)	Grains/ Breads (servings) (7) = (2) X (4)	
Boneless Beef for stewing, 1-inch cubes	11.63 lb (11 lb 10.1 oz)	Pound	9.76 (for 1 oz serv)	113.50			
Onions, whole, fresh (to provide 1 lb quartered, peeled)	1.16 lb (1 lb 2.6 oz)	Pound	7.90 (for 1/4 c serv)		9.16		
Carrots, sliced, canned (to provide 2 lb 11 oz drained)	0.66 (2/3) of a No. 10 can	No. 10 can (105 oz)	37.2 (for 1/4 c serv)		24.55		
Potatoes, whole, small, canned (to provide 3 lb 6 oz drained)	0.75 (3/4) of a No. 10 can	No. 10 can (102 oz)	43.7 (for 1/4 c serv)		32.77		
Peas, green, frozen <i>* The change to frozen peas from canned peas is a modification to the original USDA recipe # D-14.</i>	4 lb	Pound	9.59 (for 1/4 c serv)		38.36		
Notes: <ul style="list-style-type: none"> · oz to lb conversion chart is on page I-36 · remember to convert ready-to-use products to their "as purchased" amount (see examples in Method 1, pages I-51 through I-59) · the values for Columns 5, 6, & 7 are found by multiplying the value in Column 2 by the value in Column 4. · remember to divide the total 1/4 cup servings of vegetables/fruits by 4 to get the cups of fruit. · grains/breads in portions of a cup: convert all needed servings into the same portion of a cup and use the corresponding yield data for that same size · grains/breads in numbers of servings: use the yield data provided for 1 grains/breads serving 	Totals			113.50	104.84 (1/4 c)	0.0	
	Portions per Recipe			50	50	50	
	Calculations			113.50 ÷ 50 = 2.27 oz rounds down to 2.25 oz	104.84 ÷ 4 = 26.21; 26.21 ÷ 50 = 0.52 rounds down to 0.50 (1/2)		
This Recipe provides 50 portions.				Each Portion Contributes	2.25 oz meat/meat alternates	1/2 cup vegetables/ fruits	0.00 grains/ breads

Completed Recipe Analysis Worksheet—School Breakfast (100 Portions)

FIGURE 5

Recipe Name: Cooked Oatmeal with Raisins and Crunchy Wheat Germ Portions per Recipe: 100

Ingredients (1)	Quantity of Ingredient As Purchased (number of purchase units) (2)	Purchase Unit (3)	Servings per Purchase Unit in Food Buying Guide (4)	Meat/Meat Alternates (ounces) (5) = (2) X (4)	Vegetables/Fruits (1/4 cup) (6) = (2) X (4)	Grains/Breads (servings) (7) = (2) X (4)	
Regular rolled oats (dry) ⁴ (includes USDA Commodity)	4.50 lb (4 lb 8 oz)	Pound	15.1 (for 3/4 c serv)			67.95	
Wheat germ, dry	2.50 lb (2 lb 8 oz)	Pound	13.0 (for 1 oz serv)			32.50	
Raisins	4.75 lb (4 lb 12 oz)	Pound	21.4 (for 1/4 c serv)		101.65		
Notes: • oz to lb conversion chart is on page I-36 • remember to convert ready-to-use products to their “as purchased” amount (see examples in Method 1, pages I-51 through I-59) • the values for Columns 5, 6, & 7 are found by multiplying the value in Column 2 by the value in Column 4. • remember to divide the total 1/4 cup servings of vegetables/fruits by 4 to get the cups of fruit. • grains/breads in portions of a cup: convert all needed servings into the same portion of a cup and use the corresponding yield data for that same size • grains/breads in numbers of servings: use the yield data provided for 1 grains/breads serving				Totals	0.00	101.65 (1/4 c)	100.45
				Portions per Recipe	100	100	100
				Calculations		$101.65 \div 4 = 25.41$; $25.41 \div 100 = 0.25 = 1/4$ cup (in this case 1 G/B serving = 3/4 cup cooked and 1 oz dry cereal)	
This Recipe provides 100 portions.				Each Portion Contributes	0.00 oz meat/meat alternates	1/4 cup vegetables/fruits	1 serving grains/breads

⁴For the School Breakfast Program (SBP) Grades K-12, 3/4 cup of cooked cereal grains and 1 oz dry wheat germ (a ready-to-eat cereal) are each equivalent to 1 (one) grains/breads serving. In this example, the yield data for the oats served cooked corresponds to a 3/4 cup serving, and the yield data for dry wheat germ corresponds to a 1 ounce serving. Therefore, the answer is in 1(one) grains/breads serving according to SBP requirements. For programs other than the SBP, 1 grains/bread serving for Group H items is 1/2 cup cooked as stated in Exhibit A (see pages 3-15 & 3-16).