

2005 NAIP Survey  
Executive Summary  
For  
Pennsylvania

USDA  
Farm Service Agency

Aerial Photography Field Office

March 2006

## Contents

Section	Pages
<b>1.0 Introduction</b>	<b>3</b>
<b>1.1 Purpose and Scope</b>	
<b>1.2 Survey Submittals</b>	
<b>2.0 Qualitative Evaluation Summary</b>	<b>4-5</b>
<b>Executive Summary Supplemental Documents (Detached):</b>	
<b>Executive Summary Supplemental 1 – NAIP Survey Text Comments for Question 13 (MS Word)</b>	
<b>Executive Summary Supplemental 2 – NAIP Survey Text Comments for Question 14 (MS Word)</b>	

## Section 1

### 1.0 Introduction

The primary purpose of NAIP is to acquire peak growing season “leaf on” imagery, and deliver this imagery to United States Department of Agriculture (USDA) County Service Centers in order to maintain Common Land Unit (CLU) boundaries and assist with crop compliance and a multitude of other farm programs.

As evidenced by the types of customers requesting NAIP imagery, the imagery has other purposes as well. Although our primary customers are States and County Service Centers, other uses for NAIP imagery, including military, real estate, recreation, planning, etc., cannot be overlooked.

NAIP is a program with a relatively short history, beginning with pilot projects in 2001 and 2002, and moving to full volume acquisition in 2003 to 2005, based on funding and partnering. NAIP is moving out of the research and development phase and into sustainment status. By moving into a sustainment phase, a program can build and evaluate a quality business process, and stabilize. Part of this process is evaluating how NAIP is working for its primary customers.

### 1.1 Purpose and Scope

The focus of this document is to assess in a qualitative manner how NAIP is satisfying customer needs in Pennsylvania. In other words, “How did APFO do in providing *useful* NAIP imagery for its primary customer?” Answering this question comprises the purpose and scope.

### 1.2 Survey Submittals

For the initial disposition, the following States were sent surveys to disseminate to County Service Centers for completion: WA, OR, OK, KS, NE, MO, IA, MN, WI, IL, IN, OH, CT, and NC. No responses were received from KS or AZ by the 15 Dec 2005 due date. WA noted that they would respond to the survey, but due to imagery delivery/redelivery dates, responses would likely be after 15 Dec.

A second waive of surveys was sent to the following States to disseminate to County Service Centers for completion: CA, CO, MT, ND, SD, TX, LA, MS, AL, GA, FL, SC, VA, MD, PA, MI, RI, and CT. Responses were requested by 17 Feb, and by 9 Mar for select states which received imagery “late”. Surveys were accidentally sent to CT twice, however, County Service Centers only responded once. LA noted that they would only be able to get a few Counties to complete the survey by the 9 Mar due date. MI noted they would not be able to participate in the survey because of CIR rework that would be completed after the survey due date. MT noted that due to the late distribution of imagery, surveys would likely be returned after the 9 Mar due date. During the second waive of surveys, no survey responses were received by CO, GA, MI, or AL. Surveys received after 9 Mar 06 were not scored.

## Section 2

### 2.0 Qualitative Evaluation Summary

NAIP Assessment Surveys were provided by email to County Service Centers via the State Office and responses were requested by 17 Feb 06. Out of the responses received, in Pennsylvania, 1531 of a possible 2313 points were achieved, for a weighted average score out of 1.0 of .662, for a rating of 66.2%. Translated into survey terms, this is an overall rating of “Satisfied” nudging towards a rating of “Neither Satisfied or Unsatisfied”. The map on the following page graphically represents overall survey results by county. These results indicate that generally the counties that participated in the survey were satisfied with 2005 NAIP and that the products met customer needs most of the time. However, there is a good deal of room for improvement.

Most textual comments from the survey revolved around color quality/resolution, and timing of imagery acquisition and delivery. Textual comments can be found in the Executive Summary Supplementals 1 and 2. A statistical summary by question of survey results is shown below. Note that Q1-8 are out of a possible 5 points and Q9-10 are out of a possible 10 points. Statistically, the lowest average scoring question was Q1, “Was the imagery received by your office in time to be useful for crop compliance work?” Statistically, the highest scoring question was Q8, “Is the imagery useful for historical purposes, including prior year crop disaster measurements, or any other purpose where comparing older imagery to newer, or historical change detection is of importance?”

Q1		Q2		Q3		Q4		Q5	
Mean	2.772727273	Mean	3.459459459	Mean	3.894736842	Mean	3.853658537	Mean	3.586206897
Standard Error	0.183527902	Standard Error	0.175848841	Standard Error	0.209277949	Standard Error	0.196186122	Standard Error	0.168426808
Median	3	Median	4	Median	4	Median	4	Median	3
Mode	3	Mode	4	Mode	5	Mode	5	Mode	3
Standard Deviation	1.21738638	Standard Deviation	1.069646738	Standard Deviation	1.290075918	Standard Deviation	1.256204116	Standard Deviation	0.907006118
Sample Variance	1.482029598	Sample Variance	1.144144144	Sample Variance	1.664295875	Sample Variance	1.57804878	Sample Variance	0.822660099
Kurtosis	-0.318058698	Kurtosis	-0.089049788	Kurtosis	-0.062946683	Kurtosis	-0.112975959	Kurtosis	-0.968398839
Skewness	0.539697662	Skewness	-0.464604679	Skewness	-0.990025439	Skewness	-0.903658973	Skewness	0.650293694
Range	4	Range	4	Range	4	Range	4	Range	3
Minimum	1	Minimum	1	Minimum	1	Minimum	1	Minimum	2
Maximum	5								
Sum	122	Sum	128	Sum	148	Sum	158	Sum	104
Count	44	Count	37	Count	38	Count	41	Count	29
Q6		Q7		Q8		Q9_X2		Q10_X2	
Mean	3.931818182	Mean	3	Mean	4.028571429	Mean	5.76744186	Mean	5.590909091
Standard Error	0.170181247	Standard Error	0.169030851	Standard Error	0.166454447	Standard Error	0.371816065	Standard Error	0.365415836
Median	4	Median	3	Median	4	Median	6	Median	6
Mode	5	Mode	3	Mode	4	Mode	6	Mode	6
Standard Deviation	1.128854683	Standard Deviation	0.774596689	Standard Deviation	0.984757787	Standard Deviation	2.43816099	Standard Deviation	2.423894443
Sample Variance	1.274312896	Sample Variance	0.6	Sample Variance	0.969747899	Sample Variance	5.944629014	Sample Variance	5.875264271
Kurtosis	0.19314453	Kurtosis	0.994152047	Kurtosis	3.527544366	Kurtosis	-0.732657637	Kurtosis	-0.766077818
Skewness	-0.876930516	Skewness	0.713444301	Skewness	-1.627612897	Skewness	0.314820834	Skewness	0.083941263
Range	4	Range	3	Range	4	Range	8	Range	8
Minimum	1	Minimum	2	Minimum	1	Minimum	2	Minimum	2
Maximum	5	Maximum	5	Maximum	5	Maximum	10	Maximum	10
Sum	173	Sum	63	Sum	141	Sum	248	Sum	246
Count	44	Count	21	Count	35	Count	43	Count	44

## 2005 NAIP - Overall Qualitative Survey Results

