

Explanation of Worksheets in the Workbook

Worksheet	Analyses
RandF	Combined data from the Risk, CAPS, 10201FY11Analysis, DTRIA and States worksheets.
Graphs	Graphs of State Data (funding from CAPS, 10201, all sources, NAPIS records)
Correlations	Correlations across risk, CAPS, FY11 Analysis, DTRIA and IA data, and all funding sources beyond 10201.

Worksheet	Data Source	External Link
CAPS	Pasted CAPS FY11 funding values from the external file at the right.	2011 Combined J-3s.xlsx
DTRIA	Report on the 2011 accounting system entries, including year-end estimates. This is a subset of the FY11 Analysis data in Sharepoint. Listed are agreements awarded to Non-Federal entities as well as awards to Federal agencies. Accurate as of 11/23/2011.	AgreementsDTR 11-22-11.xlsx
Risk	Linked data from the external file at the right. These data were analyzed by CPHST for all States, and ranked by combined risk. ORIGINALLY, IF RISK VALUES WERE CHANGED (BY CHANGING CRITERIA WEIGHTS IN THE EXTERNAL FILE), THEN THIS SHEET WILL HAVE BEEN UPDATED AUTOMATICALLY. However, last update pasted the new combined risk values (from JMP) in the correct column here, so dynamic updates are disabled.	State Comparative Risk Assessment Percentage v35.xlsx
10201FY11Analysis	FY11 Funding and Obligations by State without program support (Goal 7 excluded). Updated 12/13/2011 from CPHST Sharepoint 'FY11 Analysis' and pasted here.	Farm Bill FY11 Reporting- CPHST Sharepoint site
PPQALL	FY11 obligations by PPQ from all funding sources by State (see comment).	Agreement all activity 07-11 12-12-11.xlsx
NAPIS	Positive records from NAPIS, 1/1/07 - 12/16/11. Links pull data from external file. Filter= +1B (present, new or reintroduced into the US, not known to be established) and +1BC (present, new or reintroduced into the US, not known to be established, eradication in progress).	JB20111216 Data Request.xlsx
NewtoUS	Data from NAPIS (1895- 1/26/2012) or from Joel Floyd in cooperation with EDP (2000 - 2010). See the appropriate column in the 'RandF' worksheet (NAPIS New to Us Records, or New to US All Sources). The former does not contain other records from Joel Floyd, that are included in the latter.	New pests
StateEmerg	FY11 obligations by PPQ from all funding sources by State (see comment). Data in the 'RandF' worksheet are linked to this external file. THESE DATA WILL NOT BE ACCESSIBLE until Matt moves the file and updates links.	Agreement all activity 07-11 12-12-11.xlsx
Deobligations	Unspent funds from Pest Detection, FY11. If the "Pest Detection Funds Unspent" column in the "RandF" worksheet has an error, open the linked file to the right.	Pest det history deobligations.xlsx
States	Postal codes, PPQ Region, State, Territories and Possessions	

This file: [http://ppqersharepoint.we.aphis.gov/national/edp/PD/CAPS/G4 Drafts/CAPS Analysis/\[Pest det history deobligations.xlsx\]ReadMe](http://ppqersharepoint.we.aphis.gov/national/edp/PD/CAPS/G4 Drafts/CAPS Analysis/[Pest det history deobligations.xlsx]ReadMe)

For more on risk clusters: C:\Documents and Settings\mhroyer\My Documents\2008 Farm Bill\Plans\1 PRAandSurvey\State risk rank and cluster JMP-9.xlsx

worksheet password= CAPS

Table 1. Coefficients of Determination (R²) for Risk, Funding, and Survey Data

R SQUARE	Risk Percent	State Risk Rank	CAPS Infra. Funding	CAPS Survey Funding	CAPS Total Funding	10201 Obligated FY11 Analysis	10201 Obligated DTRIA	PPQ All Fund Sources FY11	NAPIS Records	CAPS # Surveys	CAPS # Pests	NAPIS New to US	New to US	Survey to Infra.	E Funding FY09-11	Over/ Under Spent
Risk Percent	1.00	0.66	0.22	0.17	0.30	0.56	0.14	0.55	0.08	0.00	0.08	0.17	0.13	0.01	0.31	0.46
State Risk Rank	0.66	1.00	0.13	0.15	0.22	0.16	0.19	0.12	0.12	0.00	0.03	0.11	0.09	0.03	0.05	0.12
CAPS Infra. Funding	0.22	0.13	1.00	0.20	0.65	0.38	0.22	0.29	0.29	0.02	0.04	0.09	0.08	0.13	0.03	0.15
CAPS Survey Funding	0.17	0.15	0.20	1.00	0.86	0.41	0.66	0.29	0.29	0.16	0.13	0.66	0.61	0.30	0.04	0.16
CAPS Total Funding	0.30	0.22	0.65	0.86	1.00	0.24	0.37	0.13	0.34	0.16	0.15	0.57	0.52	0.05	0.06	0.24
10201 Obligated FY11 Analysis	0.56	0.16	0.38	0.41	0.24	1.00	0.11	0.93	0.02	0.00	0.06	0.20	0.14	0.00	0.70	0.88
10201 Obligated DTRIA	0.14	0.19	0.22	0.66	0.37	0.11	1.00	0.03	0.24	0.11	0.01	0.52	0.52	0.07	0.31	0.46
PPQ All Fund Sources FY11	0.55	0.12	0.29	0.29	0.13	0.93	0.03	1.00	0.00	0.00	0.05	0.09	0.05	0.00	0.84	0.83
NAPIS Records	0.08	0.12	0.29	0.29	0.34	0.02	0.24	0.00	1.00	0.17	0.10	0.20	0.20	0.03	0.00	0.01
CAPS # Surveys	0.00	0.00	0.02	0.16	0.16	0.00	0.11	0.00	0.17	1.00	0.21	0.13	0.15	0.04	0.01	0.00
CAPS # Pests	0.08	0.03	0.04	0.13	0.15	0.06	0.01	0.05	0.10	0.21	1.00	0.04	0.03	0.03	0.03	0.06
NAPIS New to US	0.17	0.11	0.09	0.66	0.57	0.20	0.52	0.09	0.20	0.13	0.04	1.00	0.99	0.06	0.03	0.13
New to US	0.13	0.09	0.08	0.61	0.52	0.14	0.52	0.05	0.20	0.15	0.03	0.99	1.00	0.06	0.01	0.08
Survey to Infra.	0.01	0.03	0.13	0.30	0.05	0.00	0.07	0.00	0.03	0.04	0.03	0.06	0.06	1.00	0.00	0.00
E Funding FY09-11	0.31	0.05	0.03	0.04	0.06	0.70	0.31	0.84	0.00	0.01	0.03	0.03	0.01	0.00	1.00	0.62
Over/ Under Spent	0.46	0.12	0.15	0.16	0.24	0.88	0.46	0.83	0.01	0.00	0.06	0.13	0.08	0.00	0.62	1.00

Enter RSQ to calculate significance	0.31
r	0.56
n	53
t	4.7868
Probability 'rho' = 0	0.0000149

Table 1:

Risk Percent was correlated to more variables than was state risk rank. State risk rank and risk % were highly correlated by definition (RSQ= 0.66). The difference was the information lost by assigning a whole number rank (creating a whole number *unique* arithmetic series but not allowing for a duplicate number when the risk % was the same), and losing the *scale* of the differences by state. Risk percent was highly correlated to funding from 10201 as well as all sources (RSQ= 0.56 and 0.55). This tells us that we based funding decisions partly on risk, but not exclusively on risk or the correlation would have been a perfect 1.0. Note that CAPS Total funding was only 0.30, reflecting CAPS surveys as only one piece of the total funding we provide to states. E Funding was

CAPS Total funding was more correlated to the number of new to US pest reports (NAPIS or all sources (RSQ= 0.50 - 0.52) than to number of NAPIS records (RSQ= 0.34), indicating the value of CAPS surveys is in finding new pests, not just accumulating survey records.

10201 Funding was highly correlated to funding from all sources, indicating funding decisions reflected broad needs of states and was commensurate with overall priorities (RSQ= 0.93).

Number of NAPIS records was most correlated to CAPS funding, which should be the case. However, because of wide differences between states in costs for a survey, and records of actual activity, the correlation was not perfect (RSQ= 0.34).

CAPS # Surveys and **CAPS # Pests** by state were not highly correlated to most variables (RSQ= 0.15 to 0.16). One should expect survey activity to be proportional to CAPS funding.

New to US (reported in NAPIS or otherwise) was highly correlated to CAPS Funding (RSQ= 0.57 to 0.52). This is good news and validates the importance of funding detection surveys under CAPS, even though the correlation between number of survey records to funding is not nearly as large.

Survey to Infrastructure was not a meaningful variable because no correlations stood out as especially high, with the correlation to survey the highest (RSQ= 0.30).

Emergency Funding was most highly correlated to PPQ All Fund Sources (emergency funding is included therein, so this is not an unbiased number; RSQ= 0.84) and to 10201 funding (RSQ= 0.70).

Over/ Under Spent was correlated to funding across many categories; most likely because very large amounts of funding presented challenges to states to spend all the funds.

Table 2. Coefficients of Determination (R²) for Rank Data

R SQUARE	Rank Risk	Rank Survey to Infrastruc.	Rank CAPS Total Funding	Rank All Fund Sources	Rank NAPIS Records	Rank NAPIS New to US	Rank CAPS Surveys	Rank CAPS Pests	Rank All New to US	Rank Over/Under Spent
Rank Risk	● 1.00	○ 0.03	○ 0.16	● 0.40	● 0.26	● 0.21	○ 0.00	○ 0.03	○ 0.00	○ 0.05
Rank Survey to Infrastruc.	○ 0.03	● 1.00	● 0.28	○ 0.12	○ 0.08	● 0.22	○ 0.16	○ 0.12	○ 0.02	○ 0.01
Rank CAPS Total Funding	○ 0.16	● 0.28	● 1.00	○ 0.15	● 0.29	● 0.24	○ 0.18	○ 0.17	○ 0.01	○ 0.11
Rank All Fund Sources	● 0.40	○ 0.12	○ 0.15	● 1.00	○ 0.10	● 0.55	○ 0.04	○ 0.03	○ 0.04	○ 0.00
Rank NAPIS Records	● 0.26	○ 0.08	● 0.29	○ 0.10	● 1.00	○ 0.12	○ 0.17	● 0.22	○ 0.00	○ 0.02
Rank NAPIS New to US	● 0.21	● 0.22	● 0.24	● 0.55	○ 0.12	● 1.00	○ 0.11	○ 0.12	○ 0.11	○ 0.01
Rank CAPS Surveys	○ 0.00	○ 0.16	○ 0.18	○ 0.04	○ 0.17	○ 0.11	● 1.00	● 0.38	○ 0.03	○ 0.00
Rank CAPS Pests	○ 0.03	○ 0.12	○ 0.17	○ 0.03	● 0.22	○ 0.12	● 0.38	● 1.00	○ 0.04	○ 0.03
Rank All New to US	○ 0.00	○ 0.02	○ 0.01	○ 0.04	○ 0.00	○ 0.11	○ 0.03	○ 0.04	● 1.00	○ 0.00
Rank Over/Under Spent	○ 0.05	○ 0.01	○ 0.11	○ 0.00	○ 0.02	○ 0.01	○ 0.00	○ 0.03	○ 0.00	● 1.00

Table 2 (RANKED DATA):

Risk RANK (from %) was most correlated with RANK funding from all sources (RSQ= 0.40) and much less so with RANK of CAPS Total funding (RSQ= 0.16).

RANK Survey to Infrastructure was most correlated to RANK CAPS Total funding (RSQ= 0.28).

RANK CAPS Total Funding was most correlated to RANK NAPIS records (RSQ= 0.29), runner up was to RANK Survey to Infrastruc (RSQ= 0.28).

RANK funding from all sources was most correlated to Risk RANK (RSQ= 0.40).

RANK NAPIS records was most correlated to RANK CAPS Total funding (RSQ= 0.29).

RANK NAPIS New to US was most correlated to RANK CAPS Total Funding (RSQ= 0.22).

RANK CAPS # Surveys was most correlated to RANK CAPS # Pests (RSQ= 0.38).

RANK New US from all sources was not very correlated to any other RANKED variable

Enter RSQ to calculate significance	0.3
r	0.55
n	53
t	4.7868
Probability 'rho' = 0	0.0000149