PANDA

A Dynamic Tool for Tracking Progress and Performance in Real Time

Chris Stringer
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U.S. Census Bureau
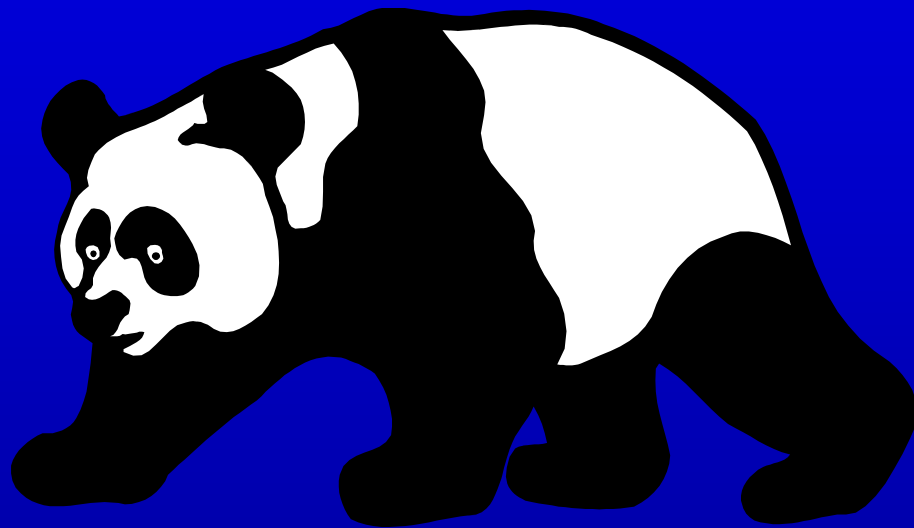
Performance

A

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Data

Analysis tool

Development of PANDA

- Developed for the American Housing Survey
  - Long data collection period
  - Data transmitted on a flow basis throughout data collection

- Transition from paper to CAPI
  - Completed cases transmitted directly, bypassing supervisors
  - Processing system redesigned
  - Needed a tool to measure quality

Purpose of PANDA

- Provide data at national, regional, FR, and individual case levels
- Provide an early warning of possible problems
  - FR difficulty with concepts
  - Falsification
- Provide up-to-date reports and tables

PANDA Report Components

- Vacancy rates

- Average household size

- Time of interview

- Minutes per case

- Responses to select survey items
  - age, salary, interest income, phone in unit

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Welcome Chris Stringer

May 06, 2004

Welcome to the American Housing Survey **Performance and Data Analysis** (PANDA) tool.

Use the navigation bar at the top of the page to navigate to the different sections of PANDA. The reports section will display several reports. The trace files section will allow you to retrieve a trace file either by control number or case id. The search section will allow you to query the database for specific criteria. The settings section will allow you to change your password and default settings. And last but not least, the help section will display information on how to use PANDA.

Data is available for cases received by June 03, 2003.

Your last login was on March 03, 2005 at 10:58:38 AM.

You have logged in 2 times this week and 2 times overall.

There are currently 1 users online.

Welcome to the 2004 PANDA reports. We hope you find these reports useful. If you have any problems with this system - feel free to contact us:

Dan Collier @ 301.763.3890

Deanna Wilson @ 301.763.6078

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Reports for AHS Total

Summary Reports

- RO/Area Totals
- Cumulative/Weekly Report
- Average Cases Per FR

- Special Living Sample RO/Area Totals
- Special Living Sample Cumulative/Weekly Report

- Cases Changed to Type A in Processing

Top 15 FR Reports*

- Highest Nonresponse Rate for Salary of Reference Person
- Highest Number of Regular Occupied Interviews Completed in Less Than 20 Minutes
- Highest Number of Cases Completed 12:00 a.m.-7:59 a.m.
- Highest Vacancy Rates

*For FRs with 10 or more total cases

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Cumulative/Weekly Report

cumulative | **indicator variables** | **minutes per case** | **time of day** | print | reports main

2005 AHS-N Weekly Report for Detroit (24) - Cases Received By: 06/03/2003
Most Recent Avg HH Size For RO = 2.46

Statistics by	Total	#PV	% Repl. HH	Type A	Type B	Type C	URE Int.	Par. Int.	Vac. Rate	Resp. Rate	Salary of ref. per.	Pres. of family int. inc.	Avg. HH Size for Reg. Occ. Int.	pie	<14 reg. occ.	<14 vac/ure	14-19 reg. occ.	14-19 vac/ure	20-29 reg. occ.	20-29 vac/ure	30-39 reg. occ.	30-39 vac/ure	40-49 reg. occ.	40-49 vac/ure	50+ reg. occ.	50+ vac/ure	pie	a.m. 12:00-7:59	a.m. 8:00-11:59	p.m. 12:00-5:59	p.m. 6:00-9:59	p.m. 10:00-11:59
AHS Total	1203	264	7.34	0.08	1.50	0.50	0.42	0.08	7.46	99.92	12.84	3.30	2.38	[pie]	39	24	39	25	177	24	301	8	262	2	272	5	[pie]	2	192	618	385	5
Detroit (24)	19	2	5.26	0.00	0.00	0.00	0.00	0.00	0.00	100.00	31.58	10.53	2.47	[pie]	1	0	2	0	8	0	5	0	1	0	2	0	[pie]	0	5	8	6	0
C11	1	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	1.00	[pie]	0	0	0	0	1	0	0	0	0	0	0	0	[pie]	0	1	0	0	0
E54	6	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	2.33	[pie]	0	0	2	0	4	0	0	0	0	0	0	0	[pie]	0	2	3	1	0
J20	4	2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	75.00	0.00	4.25	[pie]	1	0	0	0	0	0	1	0	1	0	1	0	[pie]	0	2	1	1	0
M38	2	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	50.00	50.00	2.00	[pie]	0	0	0	0	0	0	2	0	0	0	0	0	[pie]	0	0	1	1	0
M86	1	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	2.00	[pie]	0	0	0	0	1	0	0	0	0	0	0	0	[pie]	0	0	1	0	0
O36	1	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	100.00	100.00	2.00	[pie]	0	0	0	0	0	0	1	0	0	0	0	0	[pie]	0	0	0	1	0
R47	4	0	25.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	25.00	0.00	1.75	[pie]	0	0	0	0	2	0	1	0	0	0	1	0	[pie]	0	0	2	2	0

Table displays % of data that is Don't Know, Refused, or Missing. A high percentage can indicate poor quality data by falsification, or data collection problems.

Statistics by	Total	#PV	% Repl. HH	Type A	Type B	Type C	URE Int.	Par. Int.	Vac. Rate	Resp. Rate	%DK, Ref, or No Data for Reg. Occ. Interviews		Avg. HH Size for Reg. Occ. Int.
											Salary of ref. per.	Pres. of family int. inc.	
AHS Total	1203	264	7.34	0.08	1.50	0.50	0.42	0.08	7.46	99.92	12.84	3.30	2.38
Detroit (24)	19	2	5.26	0.00	0.00	0.00	0.00	0.00	0.00	100.00	31.58	10.53	2.47
C11	1	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	1.00
E54	6	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	2.33
J20	4	2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	75.00	0.00	4.25
M38	2	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	50.00	50.00	2.00
M86	1	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	2.00
O36	1	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	100.00	100.00	2.00
R47	4	0	25.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	25.00	0.00	1.75

| Statistics by | Total | #PV | % Repl. HH | Percent of Total | | | | | Vac. Rate | Resp. Rate | %DK, Ref, or No Data for Reg. Occ. Interviews | | Avg. HH Size for Reg. Occ. Int. |
				Type A	Type B	Type C	URE Int.	Par. Int.			Salary of ref. per.	Pres. of family int. inc.	
AHS Total	1203	264	7.34	0.08	1.50	0.50	0.42	0.08	7.46	99.92	12.84	3.30	2.38
Detroit (24)	19	2	5.26	0.00	0.00	0.00	0.00	0.00	0.00	100.00	31.58	10.53	2.47
C11	1	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	1.00
E54	6	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	2.33
J20	4	2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	75.00	0.00	4.25
M38	2	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	50.00	50.00	2.00
M86	1	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	2.00
O36	1	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	100.00	100.00	2.00
R47	4	0	25.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	25.00	0.00	1.75

Statistics by	Total	#PV	% Repl. HH	Percent of Total					Vac. Rate	Resp. Rate	%DK, Ref, or No Data for Reg. Occ. Interviews		Avg. HH Size for Reg. Occ. Int.
				Type A	Type B	Type C	URE Int.	Par. Int.			Salary of ref. per.	Pres. of family int. inc.	
AHS Total	1203	264	7.34	0.08	1.50	0.50	0.42	0.08	7.46	99.92	12.84	3.30	2.38
Detroit (24)	19	2	5.26	0.00	0.00	0.00	0.00	0.00	0.00	100.00	31.58	10.53	2.47
C11	1	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	1.00
E54	6	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	2.33
J20	4	2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	75.00	0.00	4.25
M38	2	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	50.00	50.00	2.00
M86	1	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	2.00
O36	1	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	100.00	100.00	2.00
R47	4	0	25.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	25.00	0.00	1.75

Cumulative/Weekly Report

2005 AHS-N Weekly Report for Detroit (24) - Cases Received By: 06/03/20
Most Recent Avg HH Size For RO = 2.46

Individual cases can be displayed for each FR.

Statistics by	Total	#PV	% Repl. HH	Type A	Type B	Type C	URE Int.	Par. Int.	Vac. Rate	Resp. Rate	Salary of ref. per.	Pres. of family int. inc.
				Percent of Total							%DK, Ref, or No Data for Reg. Occ. Interviews	
AHS Total	1203	264	7.34	0.08	1.50	0.50	0.42	0.08	7.46	99.92	12.84	3.30
Detroit (24)	19	2	5.26	0.00	0.00	0.00	0.00	0.00	0.00	100.00	31.58	10.53
C11	1	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00
E54	6	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00
00045607 [tra] [rpt]	1	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00
00045610 [tra] [rpt]	1	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00
00045617 [tra] [rpt]	1	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00
00045635 [tra] [rpt]	1	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00
00045669 [tra] [rpt]	1	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00
00045679 [tra] [rpt]	1	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00

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RO/Area Totals

cumulative | **indicator variables** | **minutes per case** | **time of day** | print | reports main

2005 AHS-N Weekly Report for AHS Total - Cases Received By: 06/03/2003
Most Recent Avg HH Size For RO = n/a

Statistics by	Total	#PV	% Repl. HH	Type A	Type B	Type C	URE Int.	Par. Int.	Vac. Rate	Resp. Rate	Salary of ref. per.	Pres. of family int. inc.	Avg. HH Size for Reg. Occ. Int.	pie	<14 reg. occ.	<14 vac/ ure	14-19 reg. occ.	14-19 vac/ ure	20-29 reg. occ.	20-29 vac/ ure	30-39 reg. occ.	30-39 vac/ ure	40-49 reg. occ.	40-49 vac/ ure	50+ reg. occ.	50+ vac/ ure	pie	a.m. 12:00-7:59	a.m. 8:00-11:59	p.m. 12:00-5:59	p.m. 6:00-9:59	p.m. 10:00-11:59
AHS Total	1203	264	7.34	0.08	1.50	0.50	0.42	0.08	7.46	99.92	12.84	3.30	2.38	pie]	39	24	39	25	177	24	301	8	262	2	272	5	[pie]	2	192	618	385	5
Boston (21)	316	100	10.22	0.00	1.27	0.63	0.63	0.00	11.61	100.00	14.96	3.28	2.35	pie]	12	11	12	15	46	6	79	3	56	0	69	1	[pie]	1	55	162	98	0
New York (22)	32	6	6.25	0.00	0.00	0.00	0.00	0.00	0.00	100.00	18.75	9.38	2.97	pie]	1	0	2	0	3	0	3	0	14	0	9	0	[pie]	0	1	16	14	1
Philadelphia (23)	194	35	7.43	0.00	2.58	0.52	1.03	0.00	6.91	100.00	14.29	2.86	2.16	pie]	7	4	4	5	33	2	56	1	45	1	30	0	[pie]	0	39	91	64	0
Detroit (24)	19	2	5.26	0.00	0.00	0.00	0.00	0.00	0.00	100.00	31.58	10.53	2.47	pie]	1	0	2	0	8	0	5	0	1	0	2	0	[pie]	0	5	8	6	0
Chicago (25)	101	31	18.18	0.00	0.00	0.00	0.00	0.99	12.87	100.00	13.64	4.55	2.24	pie]	4	2	1	0	14	7	26	2	16	0	27	2	[pie]	0	11	55	35	0
Kansas City (26)	177	15	1.21	0.00	0.00	0.00	0.56	0.00	6.78	100.00	9.09	3.03	2.56	pie]	2	3	6	1	19	6	47	0	51	0	40	2	[pie]	0	22	83	70	2
Seattle (27)	105	12	2.97	0.00	0.00	0.00	0.00	0.00	3.81	100.00	9.90	0.99	2.41	pie]	3	0	4	1	16	2	24	0	24	1	30	0	[pie]	1	23	51	28	2
Charlotte (28)	1	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	100.00	0.00	1.00	pie]	0	0	0	0	0	0	0	0	0	0	1	0	[pie]	0	0	1	0	0
Atlanta (29)	86	23	3.90	1.16	1.16	2.33	0.00	0.00	6.02	98.80	10.39	1.30	2.19	pie]	2	2	5	2	13	1	18	0	22	0	17	0	[pie]	0	7	46	32	0
Dallas (30)	8	4	25.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	1.75	pie]	0	0	0	0	1	0	3	0	2	0	2	0	[pie]	0	1	6	1	0
Denver (31)	114	25	4.95	0.00	7.02	0.88	0.00	0.00	3.81	100.00	7.92	3.96	2.48	pie]	6	1	3	1	11	0	23	2	25	0	33	0	[pie]	0	19	65	30	0
Los Angeles (32)	50	11	10.20	0.00	0.00	0.00	0.00	0.00	2.00	100.00	16.33	4.08	2.69	pie]	1	1	0	0	13	0	17	0	6	0	12	0	[pie]	0	9	34	7	0

Percent of Total spans Type A, Type B, Type C, URE Int., Par. Int.

%DK, Ref, or No Data for Reg. Occ. Interviews spans Salary of ref. per., Pres. of family int. inc.

Minutes Per Case for Regular Occupied Interviews, Vacant/URE Interviews spans columns <14, 14-19, 20-29, 30-39, 40-49, 50+ (each with reg. occ. and vac/ure)

Time of Day Started for Regular Occupied Interviews, UREs, Vacants, Type Bs & Cs spans a.m. (12:00-7:59, 8:00-11:59), p.m. (12:00-5:59, 6:00-9:59, 10:00-11:59)

Minutes Per Case for Regular Occupied Interviews, Vacant/URE Interviews

pie	<14		14-19		20-29		30-39		40-49		50+		pie
	reg. occ.	vac/ ure	reg. occ.	vac/ ure	reg. occ.	vac/ ure	reg. occ.	vac/ ure	reg. occ.	vac/ ure	reg. occ.	vac/ ure	
[pie]	39	24	39	25	177	24	301	8	262	2	272	5	[pie]
[pie]	12	11	12	15	46	6	79	3	56	0	69	1	[pie]
[pie]	1	0	2	0	3	0	3	0	14	0	9	0	[pie]
[pie]	7	4	4	5	33	2	56	1	45	1	30	0	[pie]
[pie]	1	0	2	0	8	0	5	0	1	0	2	0	[pie]
[pie]	4	2	1	0	14	7	26	2	16	0	27	2	[pie]
[pie]	2	3	6	1	19	6	47	0	51	0	40	2	[pie]
[pie]	3	0	4	1	16	2	24	0	24	1	30	0	[pie]

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Chart for AHS Total

2005 AHS-N Weekly Report for AHS Total - Cases Received By: 06/03/2003

Minutes Per Case

Regular Occupied Interviews

	Category	Value	Percentage
🟥	< 14	39	3.58%
🟩	14-19	39	3.58%
🟦	20 - 29	177	16.24%
🟦	30 - 39	301	27.61%
🟪	40 - 49	262	24.04%
🟪	50 +	272	24.95%
	Total	1090	

Vacant / URE Interviews

	Category	Value	Percentage
🟥	< 14	24	27.27%
🟩	14-19	25	28.41%
🟦	20 - 29	24	27.27%
🟦	30 - 39	8	9.09%
🟪	40 - 49	2	2.27%
🟪	50 +	5	5.68%
	Total	88	

Pie charts allow for easy visual comparison.

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Reports for AHS Total

Summary Reports

- RO/Area Totals
- Cumulative/Weekly Report
- Average Cases Per FR

- Special Living Sample RO/Area Totals
- Special Living Sample Cumulative/Weekly Report

- Cases Changed to Type A in Processing

Top 15 FR Reports*

- Highest Nonreponse Rate for Salary of Reference Person
- Highest Number of Regular Occupied Interviews Completed in Less Than 20 Minutes
- Highest Number of Cases Completed 12:00 a.m.-7:59 a.m.
- Highest Vacancy Rates

*For FRs with 10 or more total cases

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Trace Files

Download by Control Number

Control Number: [   ] [Download]

Download by Case ID

Case Id: [00001221] [Download]

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Search

Use the form below to query the data for cases that match the criteria you enter. To query the data, select the criteria using the drop down boxes provided. To search an entire category, leave the criteria blank. For instance, if you want to search for all cases that were done in less than 20 minutes. Select "Less Than 20 Minutes" from the minutes per case field, and leave the rest of the fields blank.

Multiple Criteria

RO Code: [▼]

FR Code: [ ]

Minutes Per Case: [▼]

Time of Day Started: [▼]

Salary of Reference Person: [▼]

Interview Type: [▼]

Special Living Flag ☐

[Clear] [Search]

Control Number / Case ID

Control Number: [ ]

Case ID: [ ]

[Clear] [Search]

Help!

General

- [Purpose & Objective of PANDA (Performance and Data Analysis Tool)](#)
- [Types of Information Available and Where They are Located](#)
- [What Does the Data Mean?](#)
- [How to Use the Data to Improve FR Performance](#)
- [Navigation in PANDA](#)
- [Printing in PANDA](#)
- [Tips on Reading Trace Files](#)
- [Possible Strategies to Use Reference Report and Trace File Data](#)

Main Report

- [Two Versions of Main Report](#)
- [Features of the Main Report](#)
- [Definitions of Data Fields in Main Report](#)

Average Cases Worked per FR

Top 15 FR Reports

- [Features of the Top 15 Reports](#)

Trace Files

Search

Settings

Summary
PANDA makes effective use of Paradata

- Global Level
  - Survey wide, looking at response rates
- Individual Record Level
  - Examining specific cases
- Survey Item Level
  - As detailed as individual keystrokes in audit trails for specific fields

Summary
PANDA enhances work of Field Operations

- Quickly identifies FRs with combination of outlier factors for investigation

- Gives timely information that allows decision making on a flow basis to protect data quality

- Designed with input from Field to address the unique data anomalies of the AHS

Future Directions

- Mechanisms to give supervisors more flexibility to work with database
- Targeted Reinterview
- More comprehensive evaluation of the interview
- Further development of performance indicators
- Expand PANDA to accommodate other CAI surveys

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Questions?