

Budgeting Interviewers

Tracking and Allocating Interviewer Time

Lisa Klein and John Stevenson



University of Wisconsin Survey Center

www.uwsc.wisc.edu



Our Research Questions

1. How can we best forecast staffing needs, given:
 - Seasonal variation in staff behavior
 - Effects of up-staffing

2. How can we most effectively track actual costs, given:
 - New accounting system
 - Available data
 - Variety of projects
 - Need to recover administrative & other costs



Main Points

- As we have grown from small to medium sized shop, we have had to completely adapt and overhaul our budget tracking.
- This change in system has solved some problems and created some new ones.
- Discuss some of these and raise other related issues.

The UW Survey Center: Who Are We?

- **An independent unit of the University of Wisconsin, College of Letters & Science**
- **Tightly linked to Sociology Department**
- **Our Clients:** 70% university affiliated, 30% with the state
- **Our Work:** CATI interviewing, mail, web, CAPI interviewing, coding, tracking and locating
- **Our Size:** 70 CATI stations, achieve ~70,000 interviewing hours per year
- **Our Staff:** Currently 165 part-time interviewers (77% student, 23% non-student staff)



University of Wisconsin Survey Center



Tracking Interviewer Time

When we were a small shop...

- Interviewers tracked project hours
- Administrators calculated differentials and project hours
- Totals summed, tracked, and charged to projects

Our Accounting System

- **UW Accounting System**
- **Shadow Accounting System:** Quickbooks
- **Field Databases**
- **Internal Productivity Tracking Programs:**
Call data and calling production



UWSC

University of Wisconsin Survey Center



Tracking Interviewer Time

With 150+ interviewers...

- Field staff utilizes databases tracking calling production on multiple levels (i.e. per interviewer, per day, per week, per year, etc)
- Other databases track training time, briefing time, and special projects



UWSC

University of Wisconsin Survey Center



Productivity Tracking Programs: Call data

Project	Case ID	Type	Date	Code	Start	Finish	Length	Elapsed
FHS Q2 2006	2000993	GENERAL	2006-04-01	63	13:04:40	13:05:41	00:01:01	00:01:43
FHS Q2 2006	2000991	GENERAL	2006-04-01	83	13:05:58	13:08:58	00:03:00	00:00:17
FHS Q2 2006	2000001	GENERAL	2006-04-01	60	13:12:38	13:14:00	00:01:22	00:03:40
FHS Q2 2006	2002082	GENERAL	2006-04-01	82	13:00:47	13:02:57	00:02:10	00:00:06
FHS Q2 2006	2002081	GENERAL	2006-04-01	60	12:59:33	13:00:41	00:01:08	00:16:04
FHS Q2 2006	2000999	GENERAL	2006-04-01	63	12:16:00	12:17:04	00:01:04	00:03:41
FHS Q2 2006	2000998	GENERAL	2006-04-01	50	12:17:14	12:18:30	00:01:16	00:00:10
FHS Q2 2006	2002079	GENERAL	2006-04-01	01	12:18:40	12:38:37	00:19:57	00:00:10
FHS Q2 2006	2000988	GENERAL	2006-04-01	50	13:15:30	13:16:29	00:00:59	00:00:07
FHS Q2 2006	2000989	GENERAL	2006-04-01	60	13:14:11	13:15:23	00:01:12	00:00:11
FHS Q2 2006	2000981	GENERAL	2006-04-01	83	13:53:47	13:55:32	00:01:45	00:00:13
FHS Q2 2006	2000980	GENERAL	2006-04-01	60	13:57:06	13:58:12	00:01:06	00:01:34
FHS Q2 2006	2001004	GENERAL	2006-04-01	82	13:58:19	14:00:00	00:01:41	00:00:07
FHS Q2 2006	2001008	GENERAL	2006-04-01	84	13:20:34	13:27:51	00:07:17	00:00:09
FHS Q2 2006	2001007	GENERAL	2006-04-01	01	13:30:47	13:53:34	00:22:47	00:02:56
FHS Q2 2006	2000987	GENERAL	2006-04-01	60	13:16:39	13:17:48	00:01:09	00:00:10
FHS Q2 2006	2001011	GENERAL	2006-04-01	60	13:17:54	13:19:06	00:01:12	00:00:06
FHS Q2 2006	2001010	GENERAL	2006-04-01	60	13:19:13	13:20:25	00:01:12	00:00:07
WLS Sibling	463195s	CONVERSION	2006-04-01	83	00:00:00	12:12:19	12:12:19	-12:04:28
WLS Sibling	301003s	CONVERSION	2006-04-01	84	12:39:05	12:43:29	00:04:24	00:00:28



UWSC

University of Wisconsin Survey Center



Productivity Tracking Programs: Calling Production

From: April 01 2006 select a preset..

To: April 01 2006 select a preset..

Get Data

All Shifts

PNUM	Hours	Completes	HPC
P9354	14.88	2	7.44
P9355	8.02	3	2.67
P9383_P9383	3.67	1	3.67
P9434_V8	3.57	1	3.57
P9434_V9	41.78	11	3.80
P9456	19.84	8	2.48
P9495	31.25	8	3.91
P9500_03	0.15	0	0.00
P9500_04	33.23	28	1.19
P9502	1.22	0	0.00
P9514	10.74	9	1.19
P9516_01	8.26	5	1.65
P9516_02	18.85	21	0.90
Total	195.46	97	2.02



UWSC

University of Wisconsin Survey Center



Great, right?

1. Seasonal Variation – Training Hours
2. Seasonal Variation – Hours Per Week
3. Seasonal Variation – Supervision Ratios
4. Allocated Costs
5. Projects That Do Not Fit Model



UWSC

University of Wisconsin Survey Center



Types of Seasonal Variation

1. Seasonal Variation – Training Hours
2. Seasonal Variation – Hours Per Week
3. Seasonal Variation – Supervision Ratios



UWSC

University of Wisconsin Survey Center



As a Result of Seasonal Variation

- Nearly 80% student staff causes seasonal variations largely dependent on the academic calendar
- New tracking methods attempt to capture, account for, and make use of seasonal variation data

Seasonal Variation – Training Hours

Types of Variation: New Interviewer Training Time

Month	New Interviewer Training Hours
January	153
February	838
June	626
July	0
September	60
October	927
December	285

Seasonal Variation – Training Hours

Types of Variation: New Project Briefing Time

Month	New Project Briefing Hours
January	231
February	246
June	316
July	660
September	265
October	223
December	95

Seasonal Variation – Hours Per Week

Types of Variation: Interviewer Hours Worked

Month	Avg. Hours Billed per Week
January	13
March	14
June	16
September	14
December	7.5

Seasonal Variation – Hours Per Week

Types of Variation: Intra-Month Variation due to Attrition and Academic Calendar Vacation

Time of Year per Week	% of Staff Working	Avg. Hours
Winter Break	47%	18.5
Spring Finals	79%	9.9
First Week of Class	68%	13.0
Thanksgiving Weekend	77%	7.7
Winter Finals	41%	8.0

Seasonal Variation – Supervision Ratios

Types of Variation: Fluctuation of Interviewer Staff Leads to Changes in Supervision Ratios

➤ Average Interviewer Hours Per Shift Supervisor Hour

Have varied from:

2.9 in January of 2006

6.3 in April 2006

Higher in Summer

* Note that UWSC shift supervisors have wide range of tasks.



University of Wisconsin Survey Center



Internal Time Allocation Databases

Interviewer Time Tracker

	Calling Time	Initial Training	1 on 1 Trainee Time	1 on 1 Trainer Time	Briefings	Refusal Avoidance	Meetings	Miscellaneous	Total
Jan.	90.08%	2.20%	0.65%	0.65%	5.34%	1.20%	3.74%	-3.86%	100.00%
Feb.	72.46%	3.12%	7.75%	6.05%	4.96%	0.00%	0.00%	5.66%	100.00%
March	76.20%	2.29%	5.43%	4.23%	7.73%	0.38%	0.00%	3.74%	100.00%
April	71.49%	2.56%	4.68%	3.65%	1.80%	0.84%	3.27%	11.71%	100.00%
May	86.67%	2.94%	1.27%	0.99%	5.01%	1.52%	0.00%	1.60%	100.00%
June	70.31%	0.48%	3.78%	2.95%	7.54%	0.00%	2.03%	12.91%	100.00%
July	89.49%	0.00%	0.00%	0.00%	0.55%	0.00%	0.00%	9.96%	100.00%
Aug.	92.93%	0.00%	0.00%	0.00%	4.88%	0.00%	0.00%	2.19%	100.00%
Sept.	71.57%	1.28%	0.00%	0.00%	5.67%	0.00%	2.99%	18.49%	100.00%
Oct.	65.82%	3.25%	9.43%	7.35%	4.09%	0.00%	0.00%	10.06%	100.00%
Nov.	72.56%	2.37%	6.75%	5.26%	3.25%	0.00%	0.00%	9.81%	100.00%
Dec.	83.79%	0.00%	4.20%	3.27%	2.49%	0.00%	0.00%	6.25%	100.00%
Avg.	78.61%	1.71%	3.66%	2.87%	4.44%	0.33%	1.00%	7.38%	



UWSC

University of Wisconsin Survey Center

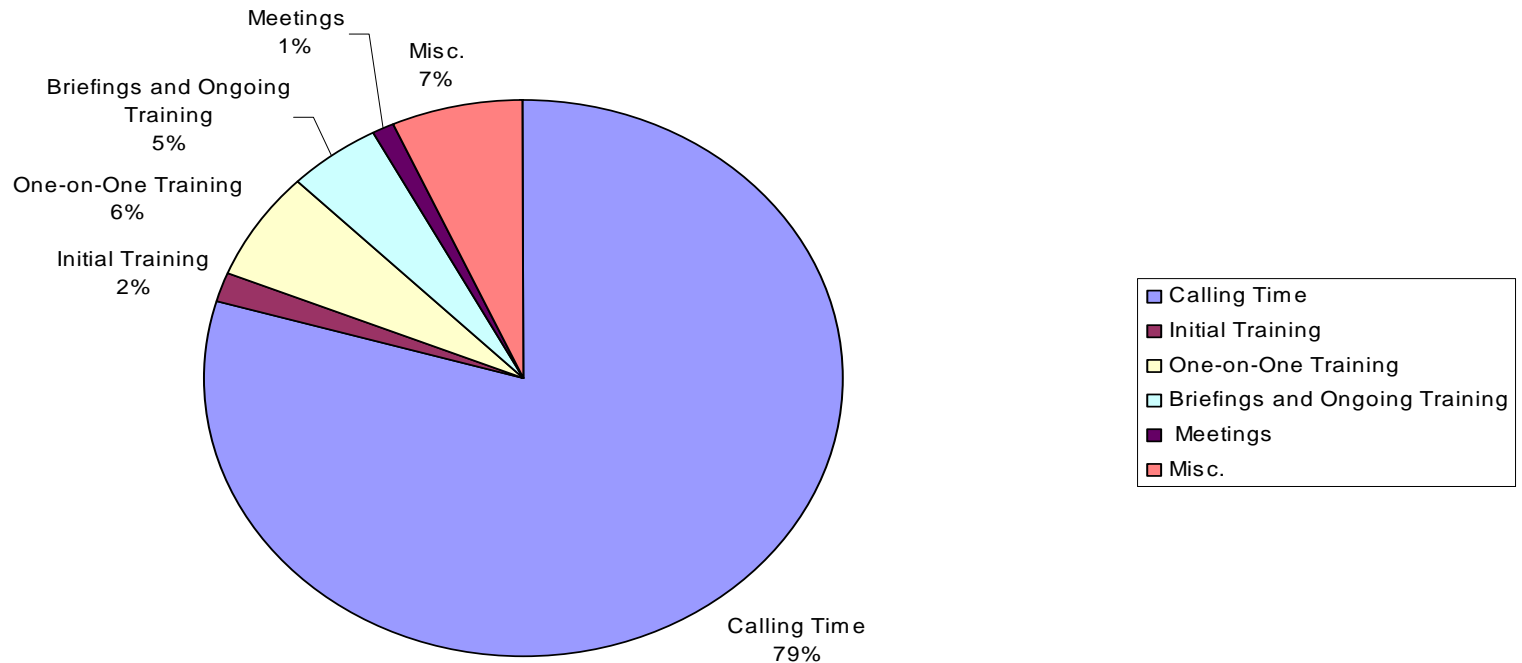


Effects of Seasonal Variation

- Budget estimates for the same project at different times of the year will be different (i.e. certain times of the year are more cost-effective than others)
- Fewer interviewer hours at certain times of the year makes supervisory costs more expensive seasonally
- What do we get for our money?
 - Scheduled time v. paid time v. calling time fluctuates seasonally
 - Budgeting additional time for training and briefings changes seasonally

Interviewer Time Allocation, 2005

Tracking Interviewer Time, January-December 2005



UWSC

University of Wisconsin Survey Center



Challenges to Tracking and Budgeting

4. Allocated Costs

5. Projects That Do Not Fit Model



UWSC

University of Wisconsin Survey Center



Allocated Costs

Allocated Supervisory Staff Costs

- Supervisors
- Shift leaders
- Director of Field Operations

Allocated Administrative Costs

- Business Office
- Hiring & Staffing
- Misc. Supplies
- Shared Operating Expenses

Projects That Do Not Fit the Model

Some types of projects are not captured too well by our production tools:

- CAPI Studies
- Data Entry
- Mail Surveys
- FG's
- And variance among types of phone surveys

Tasks That do Not Fit The Model

Some types of tasks are not captured too well by our production tools:

- Instrument debugging
- Tracking
- FG Recruiting
- Data Entry
- Other odd tasks



UWSC

University of Wisconsin Survey Center



What Works Well

- Tracking the old way was much too labor intensive.
- Interviewer reports also had errors.
- We have better institutional data.
- We collect meta-data to examine calling.
- Linking of production and budget data.
- Easier to evaluate project budgets.
- New system is flexible; we continuously improve both field and budget tracking tools.



We Would Like to Hear More About...

- Offering different calling strategies & plans
- Budgeting different calling strategies & plans
- Optimal vs. realistic interviewer productivity levels



UWSC

University of Wisconsin Survey Center



Appendix A: Alltime, Calltime, and Billed Time

- **Billed Time**= Total amount of time interviewers are paid to work
- **Alltime**= Time Spent in and Between Calls
- **Calltime**= Time Spent in Calls

Appendix A: Alltime, Calltime, and Billed Time

	Billed	Alltime	Alltime/Billed	Calltime	Calltime/Billed	Calltime/Alltime
January	4,328.55	3899.1	90.08%	2957.6	68.33%	75.85%
February	4,953.25	3589.3	72.46%	2561.8	51.72%	71.37%
March	5,307.05	4043.8	76.20%	2731.1	51.46%	67.54%
April	6,242.75	4462.8	71.49%	3223.7	51.64%	72.23%
May	6,296.30	5457.3	86.67%	4173.1	66.28%	76.47%
June	8,679.85	6102.40	70.31%	4709.8	54.26%	77.18%
July	7,103.25	6357.00	89.49%	4380.2	61.66%	68.90%
August	6,009.75	5584.70	92.93%	4323.6	71.94%	77.42%
September	4,681.70	3350.80	71.57%	2601.2	55.56%	77.63%
October	4,624.15	3043.50	65.82%	2490.1	53.85%	81.82%
November	5,097.95	3699.20	72.56%	2947.5	57.82%	79.68%
December	3,810.95	3193.10	83.79%	2579.9	67.70%	80.80%
Total	67,135.50	52,783.00		39,679.60		
<i>Average</i>	5,594.63	4,398.58	78.61%	3,306.63	59.35%	75.57%



UWSC

University of Wisconsin Survey Center



Appendix B: Shift Supervisory Staff Responsibilities

1. **Handling inbound calls** from...

- respondents wanting to complete an interview, voice concerns about a study, or ask questions about our research.
- interviewers needing to make schedule changes.
- clients or respondents needing to be transferred to different departments.

2. **Handling schedule requests**, such as vacation and temporary shift changes, from interviewers (including approving, processing, and filing such requests).

3. **Designating interviewer assignments** according to current field priorities and sample availability.



Appendix B: Shift Supervisory Staff Responsibilities

4. **Providing ongoing training** to experienced interviewers, including developing and implementing seminars to certify experienced interviewers as trainers of new interviewers.
5. **Providing updated information to interviewers** regarding changes in field protocols through coordination and distribution of memos.
6. **Managing study sample** by finalizing ineligible and non-participation cases, releasing held and refused cases, and ensuring that cases receive an appropriate number of call attempts and refusal conversion attempts.

Appendix B: Shift Supervisory Staff Responsibilities

7. **Providing on-shift supervision** of interviewers by answering questions, monitoring interviewer productivity and following up with interviewers, documenting personnel problems, monitoring interviewer calling rates.
8. **Monitoring** data quality through our remote silent-entry monitoring system, evaluating interviewer performance, documenting performance, and having follow-up conversations regarding the monitoring.
9. **Completing the training of new interviewers** by conducting a mock interview and evaluation prior to allowing interviewers to call independently.
10. **Processing interviewer resignations** by ensuring that the necessary paperwork is completed, and notifying appropriate staff.



UWSC

University of Wisconsin Survey Center

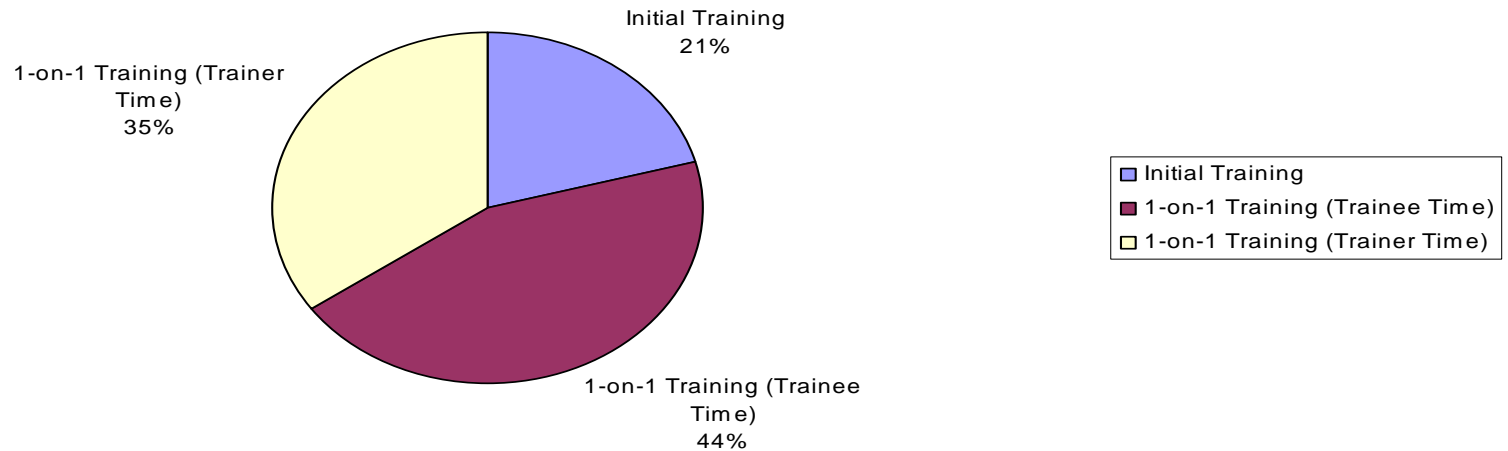


Appendix C: Current Interviewer Training Time

- **Initial New Interviewer Training:** 6 hours
- **One-on-one Training (and Trainers):** 12 hours per interviewer
- **Project-Specific Briefings**
- **Refusal Avoidance and Conversion Seminars**

Appendix C: New Interviewer Training Time, 2005

New Interviewer Training Time



Budgeting Interviewers

Questions?

John Stevenson: stevens@ssc.wisc.edu

Lisa Klein: lklein@ssc.wisc.edu



University of Wisconsin Survey Center



Training Productivity and Modifications

- Maximizing Training Returns
- Balancing Cost of Turnover
- Utilizing New Technologies: Digitally Recorded Interviews
- Condensing Training Time and Costs

Other Factors in Improving Efficiency

- Increasing Dialing- Calling Productivity
- Supervision Ratios
- Hours per Interviewer Commitments (Minimum Hours Requirements)