



Analysis of Call Transaction History Files & Active Management for Statistics Canada Surveys

Fed-CASIC Meeting

François Laflamme

Mike Maydan

Statistics Canada



Outline

- Objectives
 - Call Transaction History Files - Overview
- Analysis highlights for CATI surveys
- Responsive Design
- Active Management -
Current Status & Ongoing Work



Objectives

- Learn more about data collection process
 - Within & across surveys
- Identify operational efficiency opportunities
- Provide timely feedback & information
 - Survey Monitoring \ Active Management
- Improve the way we conduct\manage surveys



Call Transaction History Files

- BLAISE Transaction History (BTH) – CATI
 - CASEEVENT Transaction History – CAPI
 - Historical information of all attempts made
 - Not the Audit Trail
 - Extracted from **Data Integration & Production Planning (DIPP)**
 - Data warehouse for all STC surveys since 2003
- Enhance with Sample Design Information⁴



Analysis of Call Transaction History Files - Some highlights for RO CATI surveys

- Number of attempts made
- Where we spent our data collection time?
 - Attempts versus Time Spent
- Information available prior to data collection
- Information available during data collection
 - Contact rate & Sequence of calls

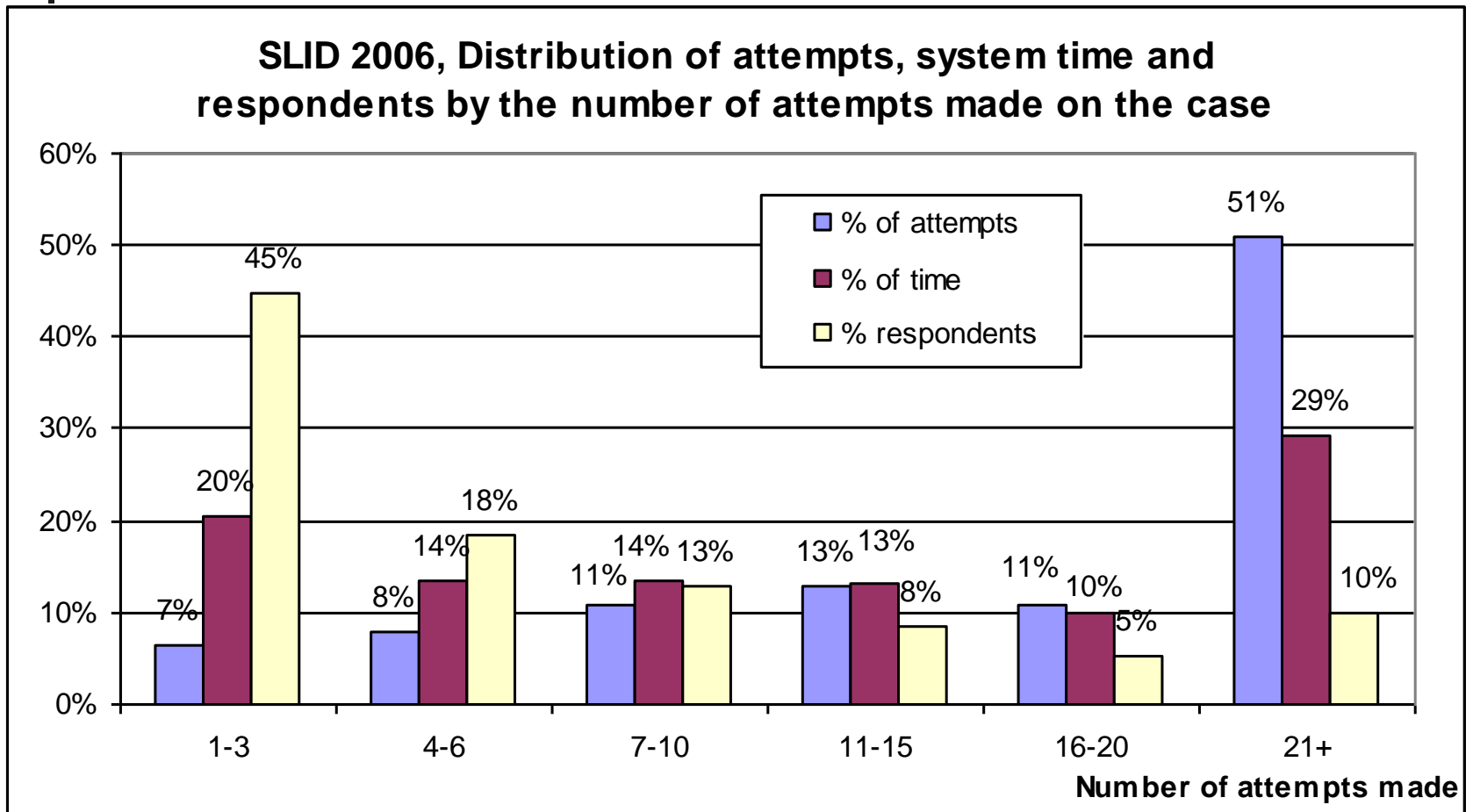
Highlights – Many attempts made

- Distribution of attempts for some CATI surveys

Survey	Sample	Count	Attempts				Respondent Attempts*			
			Mean	P75	P95	P99	0-25	26+	%	Total
Canadian Community Health Survey - CATI	110,787	1,176,189	10.6	13	38	62	61,666	3,879	5.9%	65,545
Survey of Labour and Income Dynamics(2006)	35,045	368,613	10.5	13	37	70	25,952	1,862	6.7%	27,814
Youth In Transition Survey	37,379	521,744	13.9	18	45	80	27,775	2,884	9.4%	30,659

* Respondent attempts represent the total number of attempts required to get the interview

Highlights – Attempts versus Time Spent

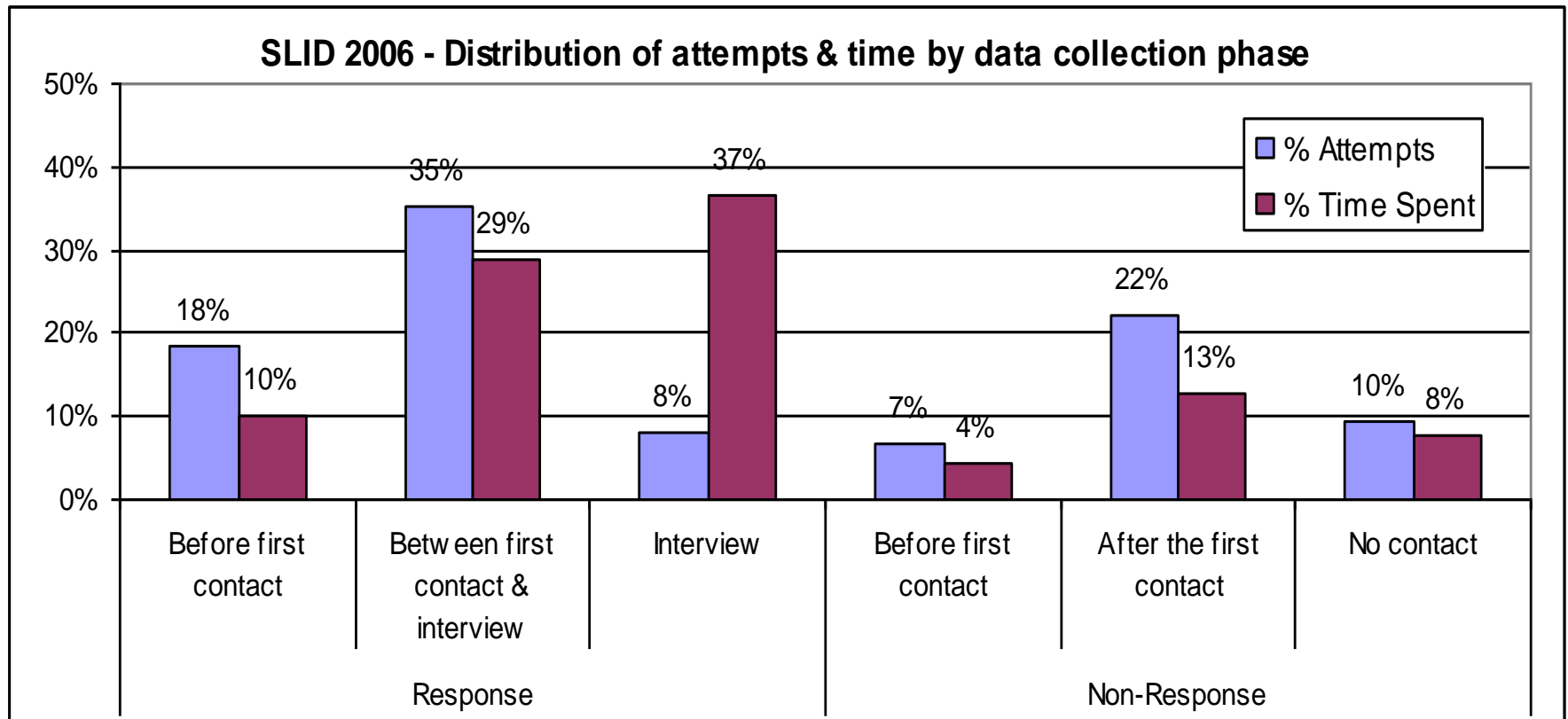


Highlights –

Attempts versus Time Spent

Where we spent our data collection time?

Spend a lot of time after the first contact with both respondents & non-respondents



Highlights –

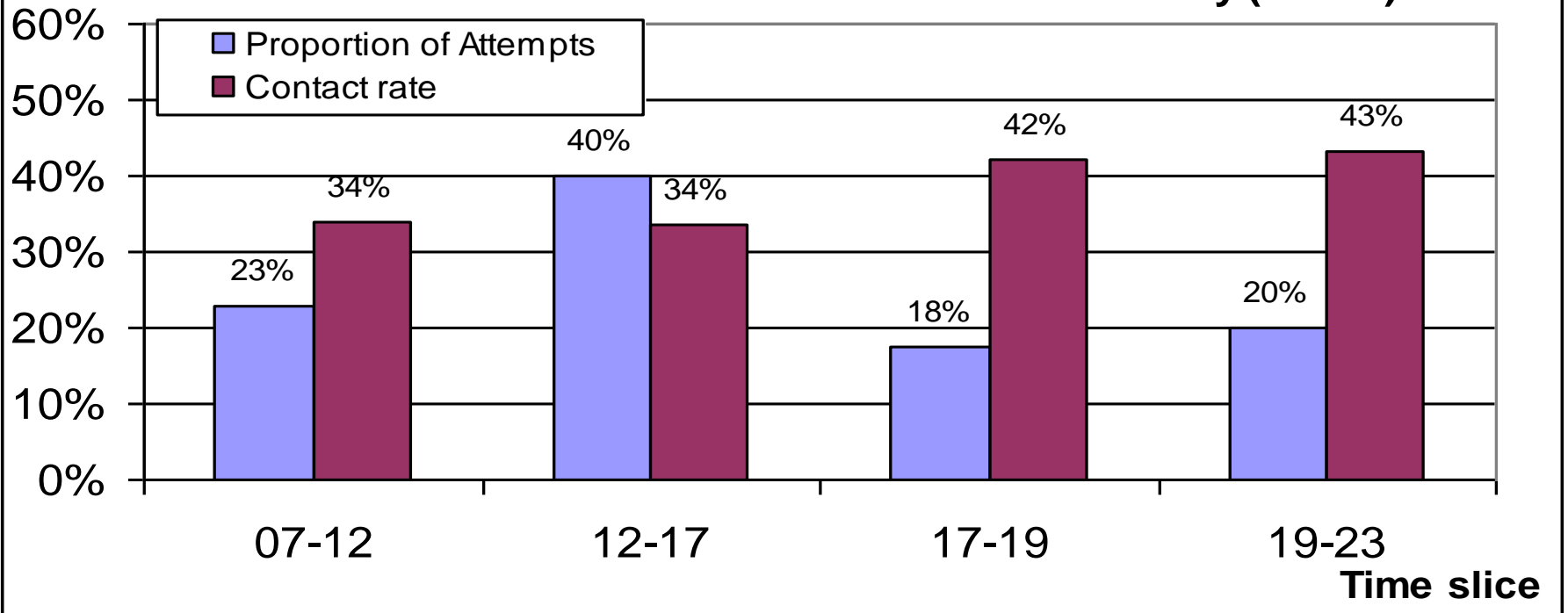
Info. gathered during data collection

First call – Contact rates

Higher contact rate in the evening

Put a lot of effort during the day

First Attempt - Proportion of Attempts and Contact Rate by Time Slice - Travel Activities and Motivation Survey (TAMS)



Analysis – Summary

What we have learned so far?

- Relatively efficient to get the first contact
- Spent a lot of time after the first contact
- Same strategy did not work all through data collection period - *especially at the end of the data collection*
- *Data collection strategy should evolve throughout the data collection period ->*
Responsive Design



Responsive Design

Responsive Design is an adaptive data collection strategy that uses information available prior to data collection as well as information that becomes available during data collection (e.g., sequence of calls, response rates by group etc.) for better decision making.

One of the key components of the *Responsive Design* is:

➤ Ongoing monitoring and timely analysis of the data collection process – ***Active Management***



What is Active Management?

Plans & tools to manage collection **while in progress**

- Key components:
 - **Monitoring (progress, major indicators)**
 - **Timely analysis of the data collection process**
 - **Identify or predict problems**
 - Corrective actions & communication
- Find the problem when it occurs (or even before), not when collection has ended
 - Information is timely available the day after

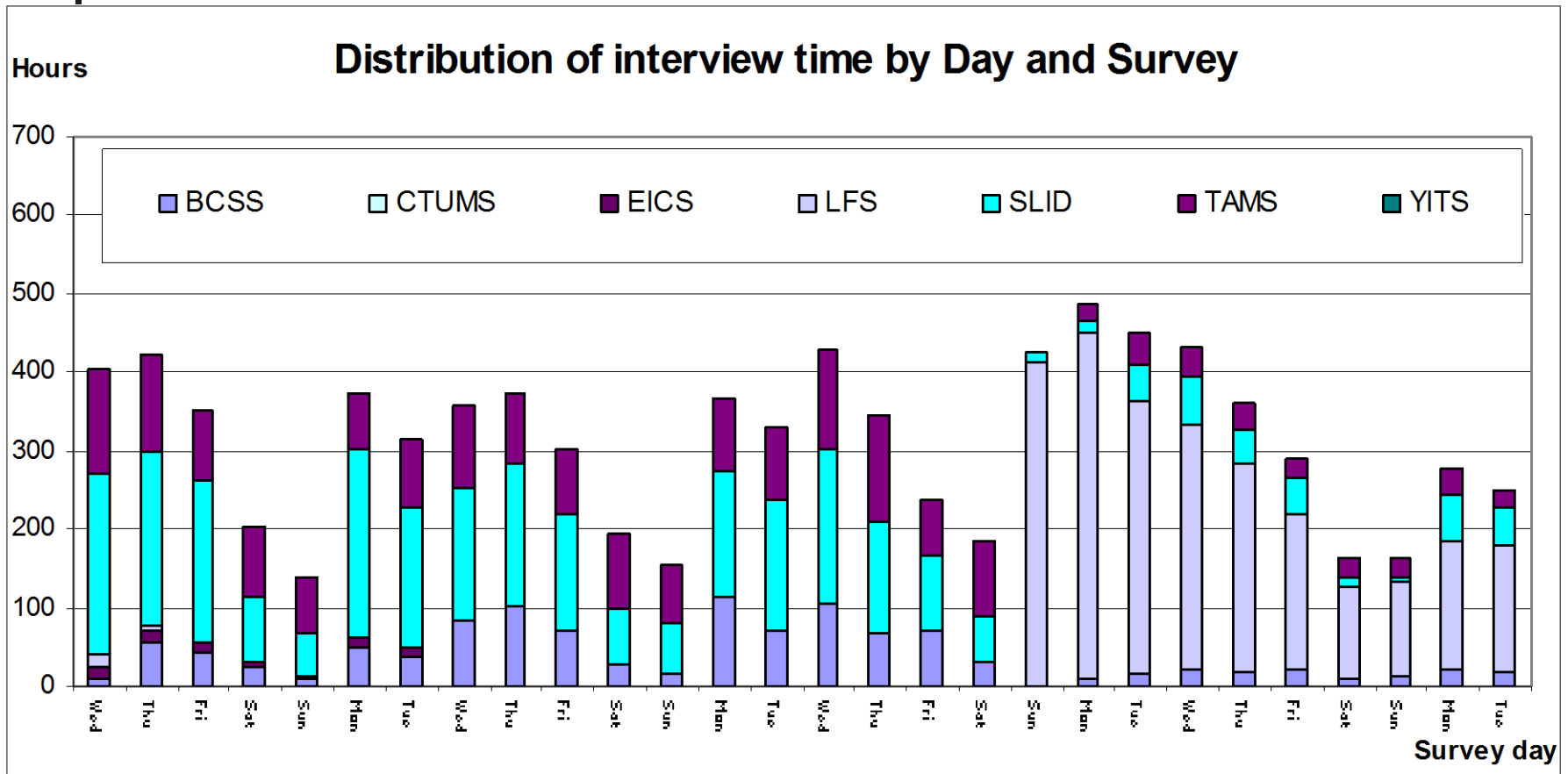
Active Management & Survey Monitoring – Indicators \ Issues Monitored



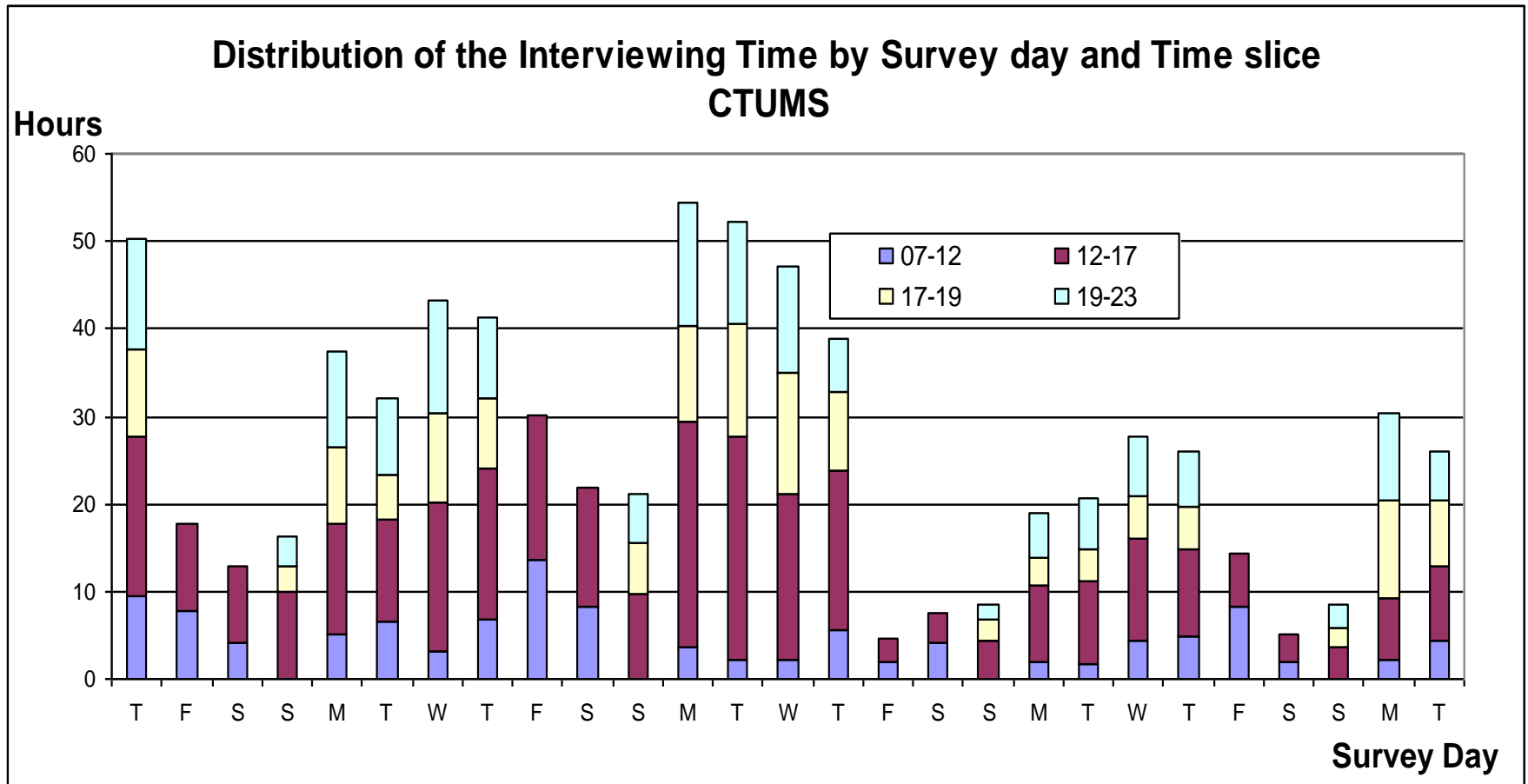
1. Interview time across surveys
2. Interview time by survey, day and time slice
3. In progress sample by day
4. Target sample population (detailed response rate)
5. Refusals and Tracing
6. Staff Levels and available cases (Workload)
7. Others and ad hoc requests

➤ **Some Examples**

1. Interview time across surveys



2. Interview time by survey, day & time slice (period of day)





3. In progress Sample

This report also includes Browser and Cap on Calls monitoring

Surv day	Daily work Browser			Number of attempts made on Cases available at the beginning of the survey day								Progress monitoring										
	Att.	cnt	%	Cases	0	1-5	6-10	11-15	16-20	21-24	25+	Samp.	Samp.	Samp.	Daily	Cumulative Resolved cases					Cases Inprog. nextday	
																Total	Resp	resp	cap	cap		Oth
1	2044	60	2.9%	11,807	9,987	1,820	0	0	0	0	0	11,807	1,820	9,987	278	281	278	2.4%	0	0.0%	3	11,526
2	1504	60	4.0%	11,526	8,881	2,642	3	0	0	0	0	11,807	2,926	8,881	222	511	500	4.2%	0	0.0%	11	11,296
...																						
31	3959	1334	33.7%	5,390	511	2,299	739	1,090	693	48	10	11,807	11,296	511	177	6,609	6,365	53.9%	0	0.0%	244	5,198
32	3868	1803	46.6%	5,198	352	2,289	751	700	917	159	30	11,807	11,455	352	145	6,762	6,510	55.1%	0	0.0%	252	5,045
33	1450	275	19.0%	5,045	337	2,101	794	653	955	167	38	11,807	11,470	337	74	6,845	6,584	55.8%	0	0.0%	261	4,962
34	1118	387	34.6%	4,962	337	1,991	802	619	985	189	39	11,807	11,470	337	60	6,914	6,644	56.3%	0	0.0%	270	4,893



Others issues monitored

- Time zones for some surveys – especially for agriculture - In progress
- Productivity and Performance indicators reports - In-progress
- Interview pace (audit trail) - Available
- Ad hoc requests



Active Management

Current Status & Ongoing Work

- Initially the Active Management Reports were developed for CATI surveys
- Recently extended to agriculture and CAPI surveys - ongoing
- To be discussed and developed for business surveys



For further information

François Laflamme

Francois.laflamme@statcan.ca

Mike Maydan

Mike.maydan@statcan.ca