HRS Overview

- Longitudinal Survey
- Complex Multi-Sectional Instrument
- Over an one hour long interview per participant
- 25,000 participants / every two years
- Participants age range above age 50
- More than 350 variables from previous wave data
- Seven mode and language combinations
HRS Preload Process - History

• Data collected from a prior wave is presented and confirmed or updated
• Data was loaded into one location (structure)
• Changed data at that original location
Preload Block Structure
HRS Households
More HRS households
My family
Block Replicated 83 times

- 3 Respondents (current Respondent, current Spouse or Partner, any new Spouse or Partner)
- 40 Children and spouses with room for any new children if the Respondent recoupled
- 10 Household members who are not offspring
- 20 Siblings and
- 10 Parents
HRS Preload Process - History

Original data flow

- Preload structure
- Present and collect data
- Update data
Early “write it back” process

- The more fields we had the slower the application became
- Would not compile at all
Problem with the updating process

- Selective checking
- Gates
- KEEP Statements

- Example: Are you married?
Were you married last time?

Part 1:

IF (Respondents[1].X065ACouplenss= MARRIED OR Respondents[1].X065ACouplenss= PARTNERED_VOL)) THEN

A020TSameSpP_A.Keep {Keeps the data values when the field goes off the route}

A022_.keep
IF A020TSameSpP_A = empty then {only ask if empty}
A020TSameSpP_A {Is Clara still your wife?}
If A020TSameSpP = NO then

Respondents[1].X065ACouplenss := OTHER

Endif

Endif

Endif
Are you married now?

Part 2:
IF A026_Rmarried <> empty {stop lock out when X065 gets assigned below}

or

( piBA_HHX024_RelwHH_V = yes and
  (Respondents[1].X065ACoupleNSs= OTHER OR
   A020TSameSpP_A = NO )) THEN
  A026_Rmarried
If A026_Rmarried = Yes then
  Respondents[1].X065ACoupleNSs := MARRIED
Endif
How To Fix The Problem

Move it forward

Preload Data  Update Data  Final Data
“Move it forward” philosophy

- Replicate the structure
- Move the data forward into a block that has not been altered.
  - \texttt{PRELOAD\_Respondents} \rightarrow \texttt{Respondents}
- Preload now means preload – never updated
We now need less code

Part 1:
IF Preload_Respondents[1].X065ACouplenss = MARRIED OR
Preload_Respondents[1].X065ACouplenss = PARTNERED_VOL THEN
A020TSameSpP_A
If A020TSameSpP = NO then
   BA_Respondents[1].X065ACouplenss := OTHER
Endif
ENDIF

Part 2:
IF Preload_Respondents[1].X065ACouplenss = OTHER OR
A020TSameSpP_A = NO THEN
A026_Rmarried
If A026_Rmarried = Yes then
   BA_Respondents[1].X065ACouplenss := MARRIED
Endif
ENDIF
{Final Location}
Respondents[1].X065ACouplenss := BA_Respondents[1].X065ACouplenss
Why was the roster section rewritten?

- Difficult to manage code
- Problems with the selective checking mechanism
- The code became hard to understand
- With any change, the whole instrument needed to be fully re-tested
- Ensure that data was not dropped “off the route” and lost
- Ensure that we did not unintentionally overwrite data
- Problems between sections with the way the code was written
- Changing the route in the roster adversely affected the logic in later sections. These effects were observed in other family data sections
Benefits

• Better management of the selective checking mechanism
• Final data location helps to simplify problems between sections
• Easier code readability
• Confident that we can modify those areas of code
Future plans

• Plan to re-write the section that collects children transfer data
• Plan to re-write other sections, as needed
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Questions
Thank You