

NAPCS and the Economic Census: Discussion



Jay Breidt
Colorado State University
June 2013



Questions from Murphy

- 2. Do the members recommend any additional coordination efforts to help maintain the critical relationships between output and price deflator data during the transition?
- 1. Will the benefits of using a NAPCS coding structure for all product detail outweigh the costs of implementation for the three agencies? *My reaction is cautious yes.*



Specific Worries:

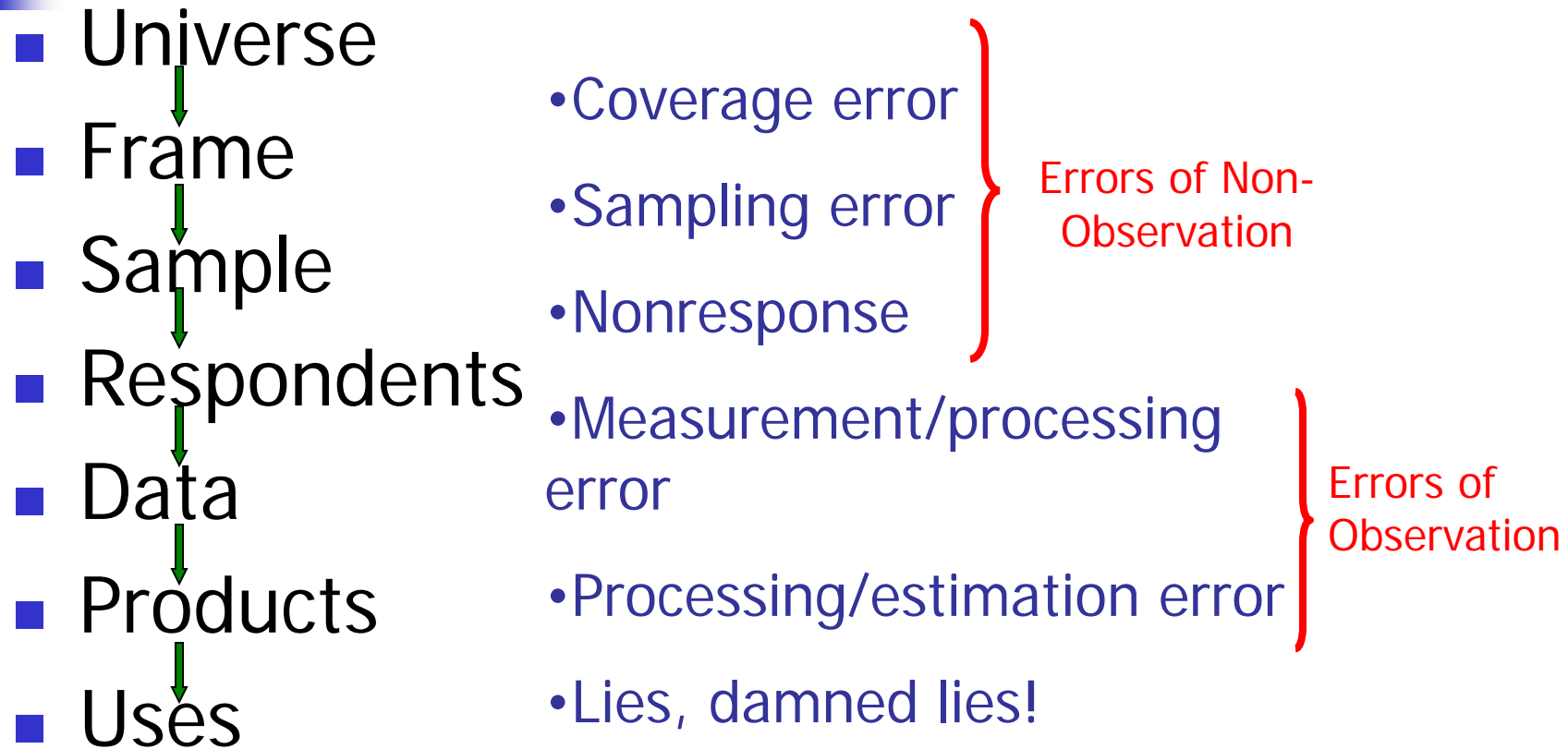
- Morgan: Structural breaks, measurement inconsistencies, need to bridge from old system to new
- Friedman: Producer Price Index program will be impacted by loss of primary/secondary products



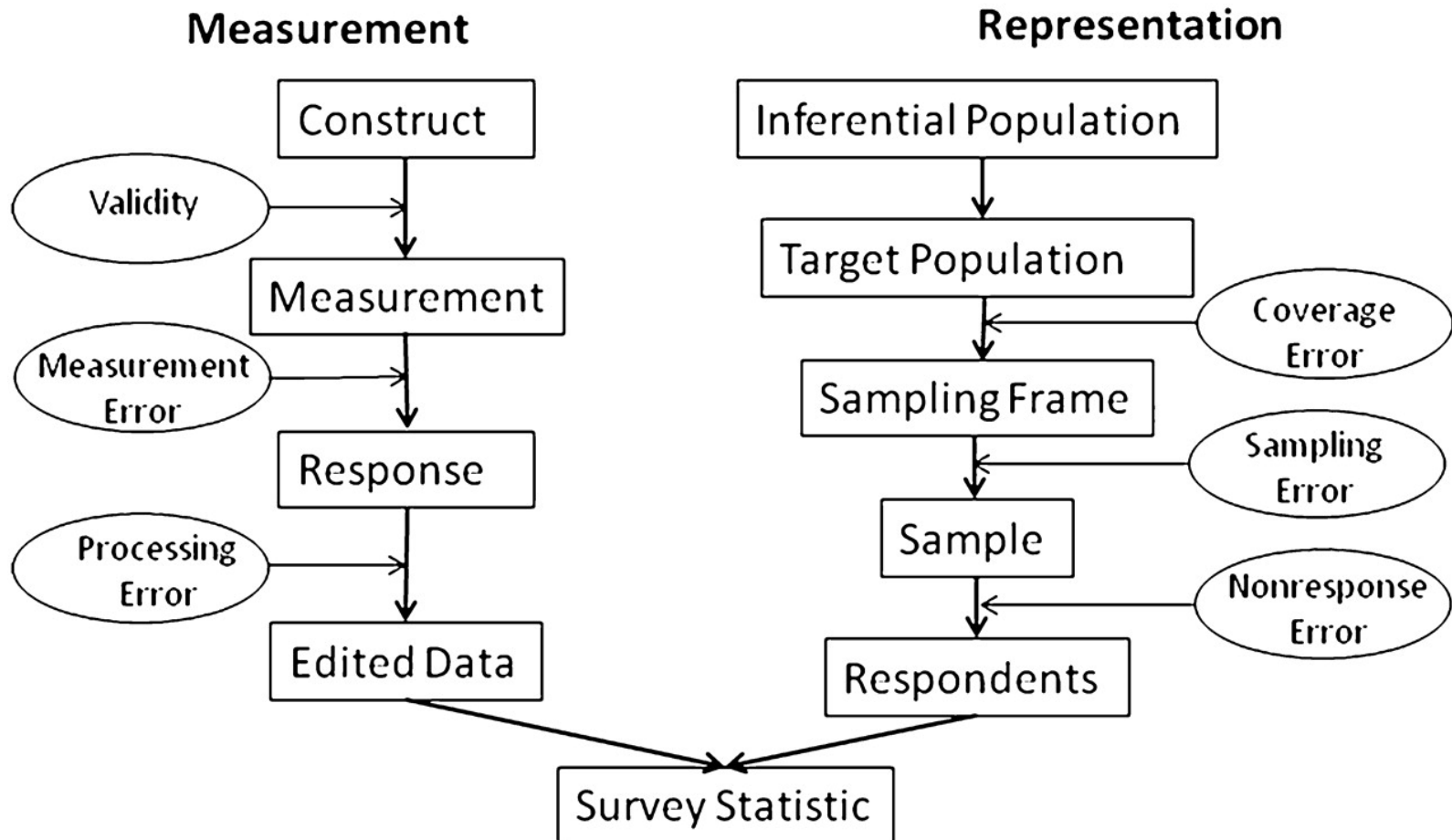
General Worry: Murphy

- “The cost to implement change of this type in the Economic Census is significant. In the absence of processing system changes due to changes in technology, the cost might exceed perceived benefits.”

Sources of Errors in Surveys



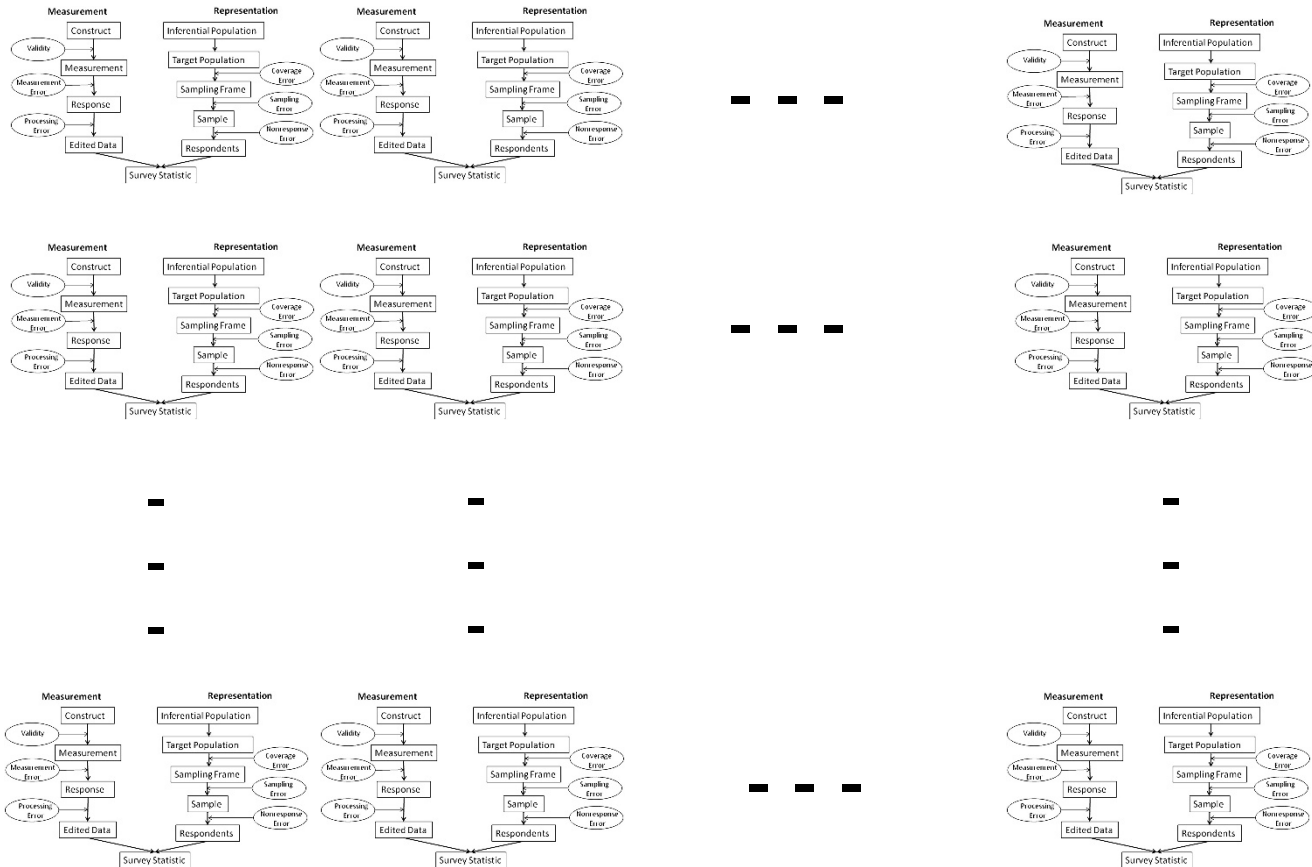
Total Survey Error



Total Statistical System Error

->->-> TEMPORAL ->->->

C
R
O
S
S
E
C
T
I
O
N
A
L





System errors across time

- Lack of timeliness
- Structural breaks
- Corrosion/aging/legacy errors
- Measurement drift
- Coverage drift
- ...



System errors across censuses/surveys/agencies

- Incompatible constructs/definitions
- Measurement inconsistencies
- Coverage inconsistencies
- Processing errors



Temporal* Cross-Sectional Interaction Errors

- “Hold-up errors”: one part of the system left waiting for another part of the system to produce a data product

Will NAPCS benefits outweigh costs?



- Simpler, cleaner, more compatible systems can reduce errors and reduce costs
 - Some errors will increase (PPI structural break)
 - But errors need to be viewed system-wide: e.g., potential for automating subsystems that can talk to each other
 - Some cost savings are essential to maintain programs
 - Other savings might be converted into further error reductions
- Future system revisions will be less error-prone



Timing

- Daunting!
- Is the time till 2017 Economic Census sufficient?
- Possible to do parallel test in 2017 on sample basis for NAPCS to smooth transition?