



# ***An Evaluation of a Training Protocol Designed to Supplement the Coverage of an Address-Based Sampling Frame***

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# Study Background

- The National Survey on Drug Use and Health (NSDUH) provides national, state and substate data on substance use and mental health in the civilian, noninstitutionalized population age 12 and older.
- Conducted by RTI under contract with SAMHSA.
- Data are collected on a quarterly basis each year.
- Approximately 700 Field Interviewers (FIs) staffed.
- Approximately 140,000 household screenings and 67,500 interviews completed annually.

# In-person Frame Supplementation

## Assumptions:

- National in-person survey
- Clustered design
- Maintaining trends is a priority
- Hybrid Frame (ABS & Field Enumeration)

## Why frame supplementation?

- ABS frame undercovers household population
- Allows more segments to be placed into ABS
- Decrease costs without sacrificing coverage\*

# In-person Frame Supplementation

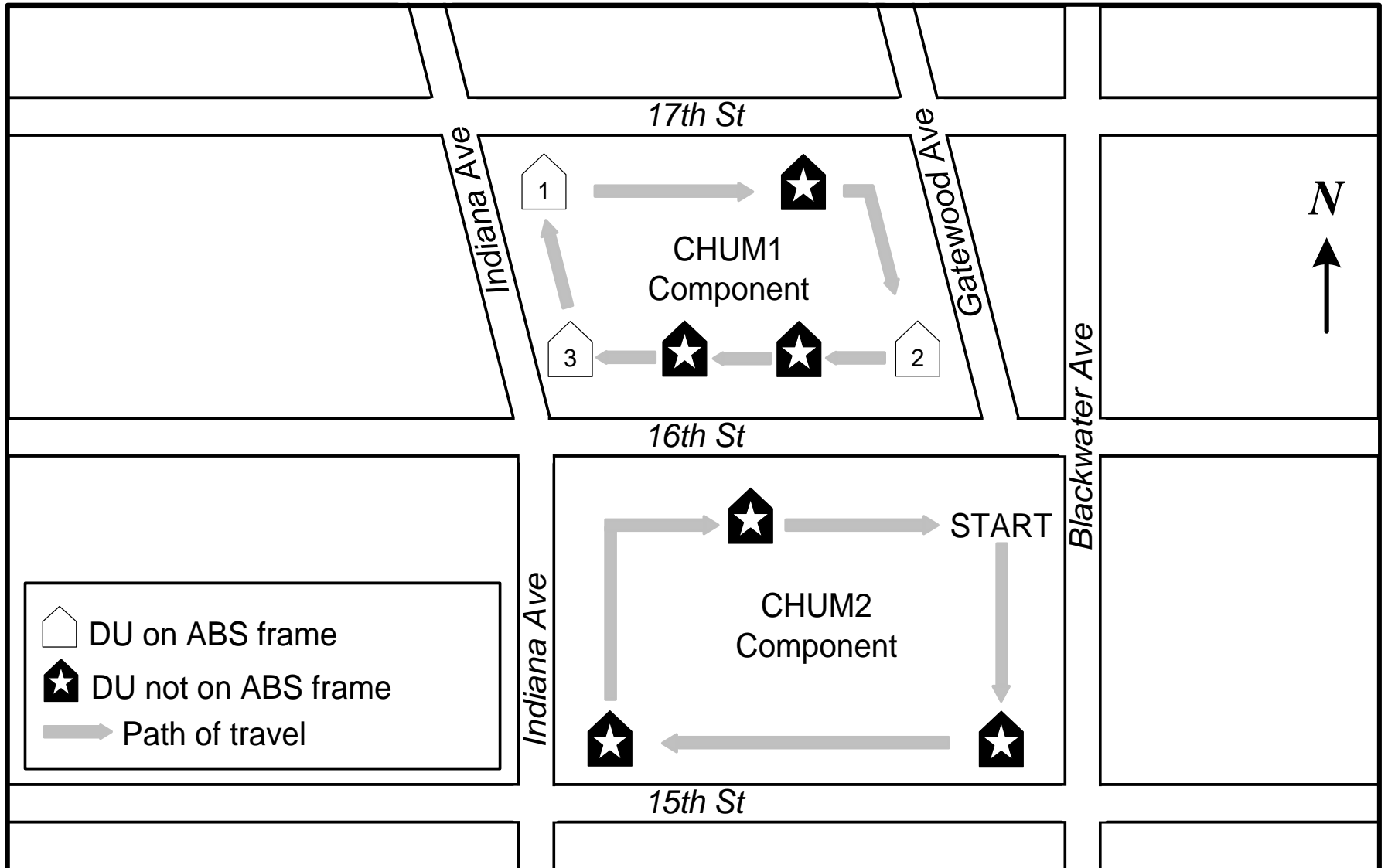
Frame supplementation is not new

- Check for Missed Units or Half-Open Interval (HOI)
- Check for Housing Units Missed (CHUM) and Waksberg approach

Largest difference between CHUM and HOI

- Responsibility Shift from Lister to Interviewer

# Check for Housing Units Missed (CHUM)



# Problems w/ Frame Supplementation

- Procedures not implemented correctly or at all by field staff
  - Lack of understanding, miscommunication
  - Not a priority. Importance not stressed?
  
- Additional costs...
  - Time in field
  - Training
  - Field support
  
- Operations Management
  - Hours of operation (time zones, nights and weekends)
  
- Sample Efficiency
  - Increased Design Effects from sub-sampling

# Overcoming Problems

- Effective Training Methods and Materials
- Effective Monitoring
  - Seeding
  - Field visits
- Field Support
- Technology can help



# Training Experiment - Goals

- Develop training materials and methods
- Test field staff implementation
- Understand the failures in implementation
- Develop a plan for improving methods

# Training

## Pre-training:

- Read handbook
- Complete iLearning course
  - Interactive CHUM introduction
  - Pre-training exercises

## In-person training:

- 4 hours
- Presentation-style format
- Video examples
- In-class exercises

# Training Experiment - Highlights

- Conducted in North Carolina:
- 20 Field Staff
- Scenarios created in the field by teams of statisticians
  - Followed experimental design
  - Scenarios not representative of the population
  - Purposively made difficult to identify weaknesses in implementation
- Field support provided by phone

# Experimental Design Factors

- Scenario Difficulty Level
  - Did simple or complex instructions need to be followed?
  
- Scenario Type
  - Single Family, apartments, group quarters, mobile homes
  - Urban/Rural
  - # missing DUs to be found
  
- Field staff experience
  - Tenure as interviewer
  - Lister
  - Type of areas typically worked (urban/rural)

# Key Results

<b>Scenario Characteristics</b>	<b>Total N</b>	<b>Scenarios Correct</b>	
		<b>N</b>	<b>%</b>
Overall	280	211	75.4
Easy	140	127	90.7
Difficult	140	84	60.0
Rural	52	38	73.1
Urban	228	173	75.9
Apartments	40	24	60.0
Non-Apartments	240	187	77.9
Day 1	130	93	71.5
Day 2	150	118	78.7

# Key Results – Day Effect

<b>Scenario Characteristics</b>	<b>Total N</b>	<b>Scenarios Correct</b>		
		<b>Overall %</b>	<b>Day 1 %</b>	<b>Day 2 %</b>
Overall	280	75.4	71.5	78.7
Easy	140	90.7	84.4	96.1
Difficult	140	60.0	59.1	60.8
Rural	52	73.1	65.0	78.1
Urban	228	75.9	72.7	78.8
Apartments	40	60.0	72.2	50.0
Non-Apartments	240	77.9	71.4	83.6

# Key Results – Field Staff Characteristics

<b>Field Staff Characteristics</b>	<b>Total N</b>	<b>Scenarios Correct</b>	
		<b>N</b>	<b>%</b>
Overall	280	211	75.4
<b>Years Experience</b>			
6 Mo to 3 Yrs	84	68	81.0
3 Yrs to 6 Yrs	98	74	75.5
6 or More Yrs	98	69	70.4
<b>NSDUH Lister</b>			
Yes	98	76	77.6
No	182	135	74.2

# Conclusions

- Rules for apartments unnecessarily complicated.
- The day effect suggests field staff could quickly get better doing the CHUM.
- Experienced field staff had more trouble implementing the CHUM correctly.



# Conclusions

- While we cannot directly extrapolate these results to the general population, we know that the “easy” cases are more typical of what is found in the field.
- We expect the Day 2, easy cases to be the norm for the NSDUH sample.

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