





Advancing IIS Together



# WELCONE

**#AIRA2018** 



# Address Cleansing 2.0: Bringing Cleansed Data Back In

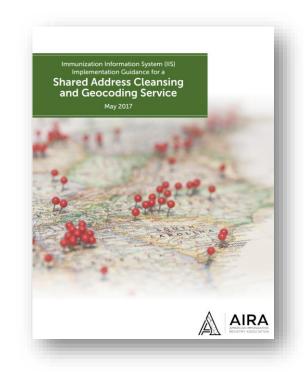
Maureen Neary, AIRA





You read AIRA's Address Cleansing Guide.

You connected to SmartyStreets.



You cleansed your data.

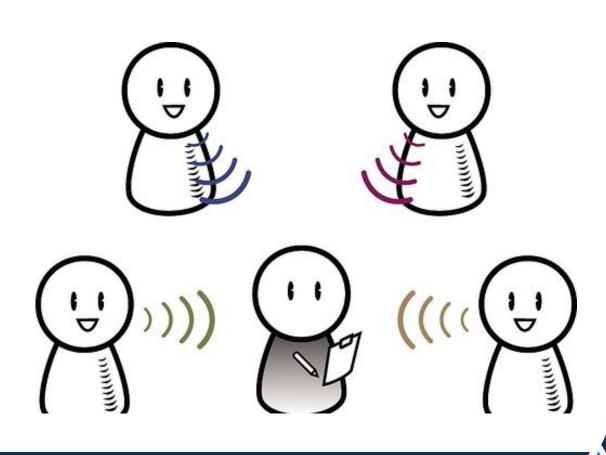
Now what?

# IIS Reintegration of Cleansed Addresses & Geocodes

#### Guidance is based on:

- Interviews with IIS programs and vendors that use SmartyStreets
- Conversations with SmartyStreets

Planned for publication in early October!





## The Benefits of Reintegration

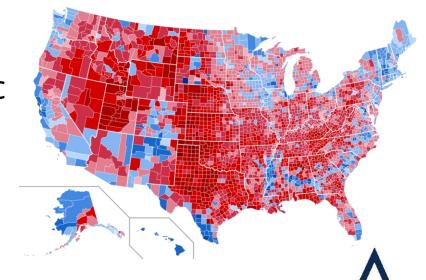
### Data Reintegration Benefits

- Enables you to automate data cleansing processes, which can free up staff resources
- Yields stronger patient-level deduplication, which increases the accuracy of your population denominator
- Improves reminder/recall mailing success, which
  - Increases childhood immunization rates
  - Reduces wasted postage cost
- Improves the quality and accuracy of your reports



### Geocode Reintegration Benefits

- Provides a visualization of data geographically at both the patient and provider level
- Improves mapping capabilities to help:
  - Generate coverage rates
  - Identify pockets of need within a geographic area
- Improves preparedness, analysis and response during an outbreak





### Draft a Successful Plan

### What Should Your Plan Entail?

- Articulate your purpose what do you want to accomplish?
- Understand SmartyStreet's response codes so you can evaluate your returned data
- Determine what response fields you want to store
- Establish your business rules





## Articulate Your Purpose





Do you want to standardize addresses?

Do you want to ensure they're deliverable?

What will you do with the cleansed data?



# Evaluate Your Returned Data

### Two Types of Response Fields

#### Metadata fields

- Provide additional detailed information about the address
- Tell whether the address is a standard mailing address or a P.O. Box

#### **Analysis fields**

- Provide a deeper breakdown on address availability
- Detail how SmartyStreets altered the address to make it valid and standardized



### Recommended: The Most Useful SmartyStreets Response Fields to Store

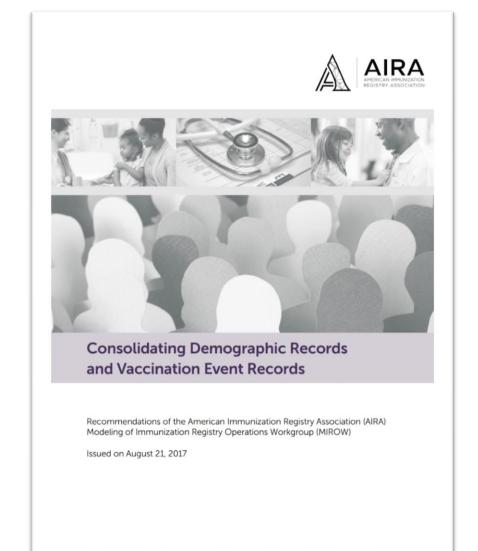
- Summary
- Footnotes
- Latitude/Longitude
- Precision

- Dpv\_footnotes
- Dpv\_match\_code
- Dpv\_vacant
- Notes



# Consolidating Demographic Records & Vaccination Event Records

These MIROW guidelines contain relevant business rules to consider



### Record Consolidation Tips from MIROW

- Retain past values
- Compare data elements of the same type
- Retain all unique values from data elements with multiple values

- Use more complete information over less complete information
- Use information that has the most recent submission date
- Prevent overwriting validated data





## Prepare Your Database

### Consider the Following: Fields



Latitude/Longitude – geographic coordinates



Precision Level – indicates the accuracy of the geographic coordinates



Address Change – the status of the address in regards to SmartyStreets

### Consider the Following: Tables

- A Staging Table holding pen for incoming / returned addresses
- An Audit Table retain what comes back
  - Did the address change format?
  - How was it changed?
  - Time stamp
  - The exact response from SmartyStreets to facilitate the retrieval of additional fields in the future





### Operationalize Your Business Rules

(a.k.a. Your Post-Cleanse Action Plan)

### Operationalize Your Business Rules

- Review status flags to determine action(s)
  - Decide on thresholds for automatically importing cleansed addresses
  - Consider need to manually correct some addresses?
- Ensure the unique ID sent with each record in multi-batch files links back to the correct patient
- Determine what data cleanup to execute
  - E.g. matching & deduplication, household grouping
- Review flags for invalid addresses due to missing data elements
  - This can indicate a problem with a particular provider





## General Tips

#### Consider...

- A mechanism to exclude invalid addresses from mailing efforts
- Notifying providers about SmartyStreets
- Running your batch processing during off-peak hours
- How many variations on one address you want to store "behind the scenes"
- How potential unexpected downtime of the service will be handled
- Establishing a process for re-cleansing address data





## Limitations

#### General Limitations

- The service handles only addresses; it has no knowledge if the intended person lives at the specified address
- Cleansing is based on a USPS database and will return the same errors as USPS
  - Jurisdictions may be more knowledgeable about local differences
- SmartyStreets cannot anticipate or account for all usergenerated errors
- SmartyStreets has its own distinct mapping methodology



### Start Using SmartyStreets!



- Fill out a card here or at the AIRA table outside registration
- Email <u>mneary@immregistries.org</u>
- Sit in on a User Group call
- Download the new guide document this Fall
- Join us for the Reintegration webinar in October
- Find more info on the AIRA website



### Many Thanks

- Michigan
- California
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# Questions or Comments?



