

# Lessons Learned in Using Online Mapping Tools on Field Studies

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# Objectives

- Review of available online mapping tools
- Show how online mapping tools have assisted in managing field staff
- Discuss some of the drawbacks of using online mapping tools
- Examine lessons learned

# What is Available?

- Current mapping tools show all of the items a traditional map could show plus the ability to zoom in and out, as well as actual satellite images of the area
- Some new online mapping tools offer features that allow a user to customize maps

# Popular Online Mapping Tools

- Google Maps - <http://maps.google.com>
- Microsoft Maps - <http://maps.live.com>
- Mapquest – <http://www.mapquest.com>
- Zillow - <http://www.zillow.com>
- Yahoo Maps <http://maps.yahoo.com>

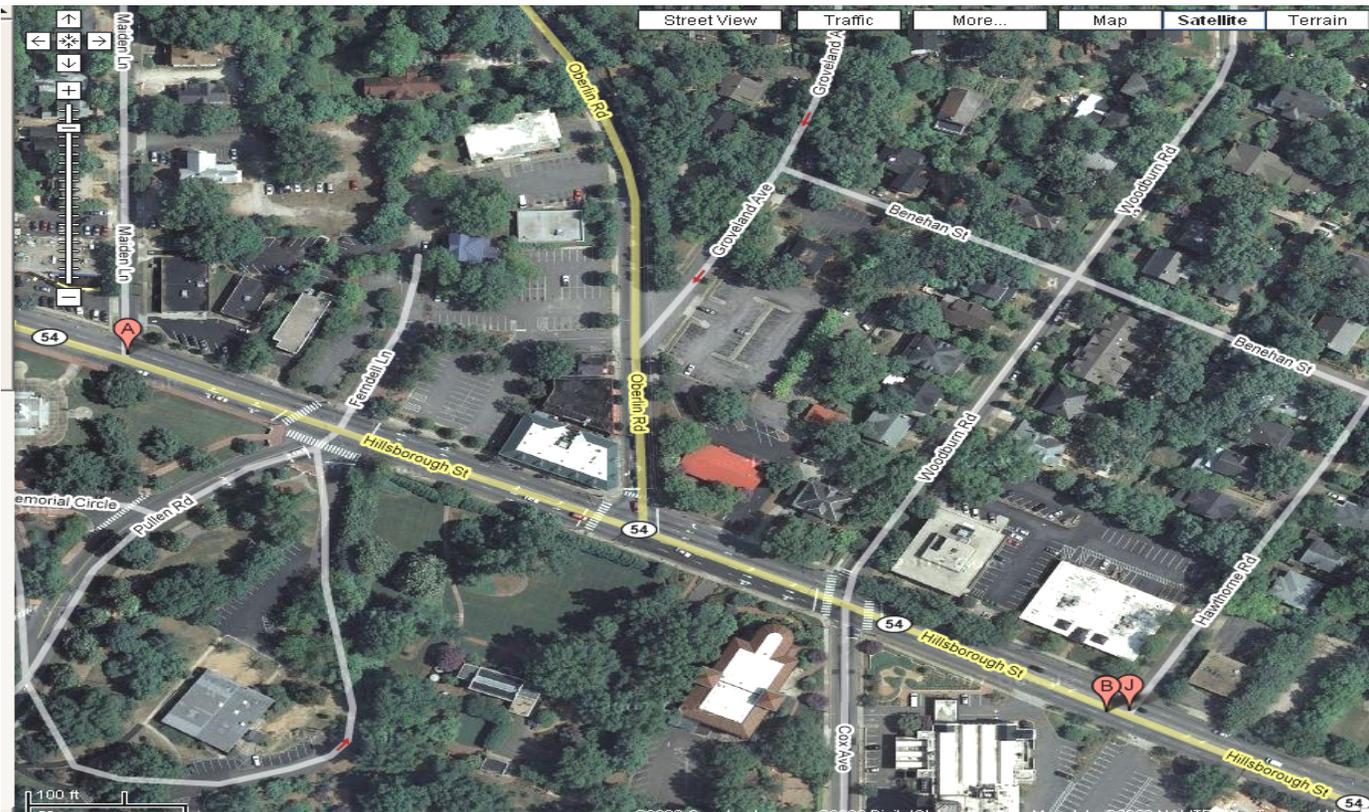
# How Online Tools Help Field Managers

- One of the primary uses of online mapping tools is to *determine driving distances* and directions between two points
- In addition to showing street maps, online mapping tools offer more detailed views using *aerial photography*
- Many tools offer more *detailed views* for users, such as Google's "Street View" and Microsoft's "Bird's Eye View"



# Aerial View

- Typical Aerial View:



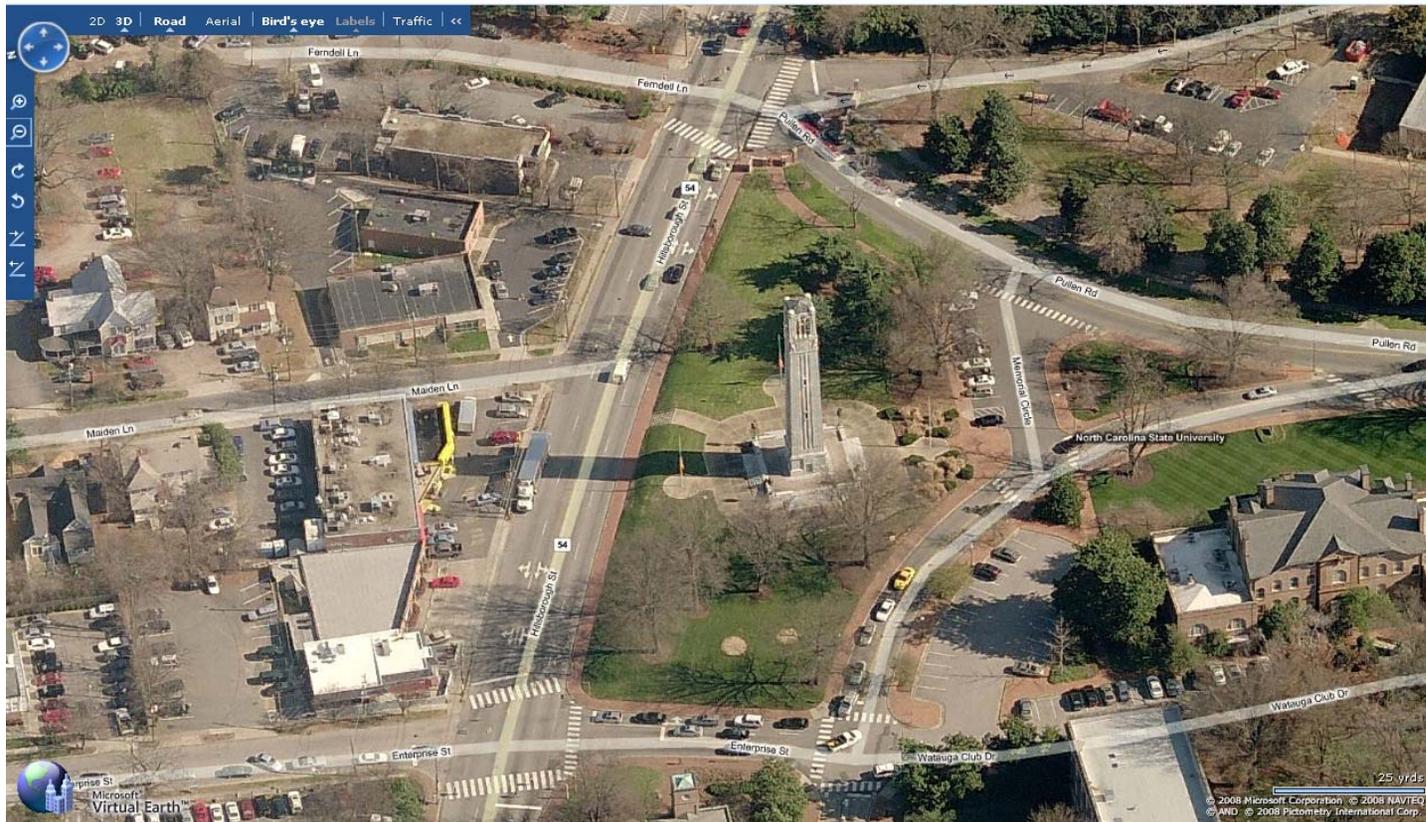
# Google “Street View”

- Street View:



# Microsoft “Bird’s Eye View”

- Bird’s Eye View:



# Microsoft “Bird’s Eye View” (cont.)

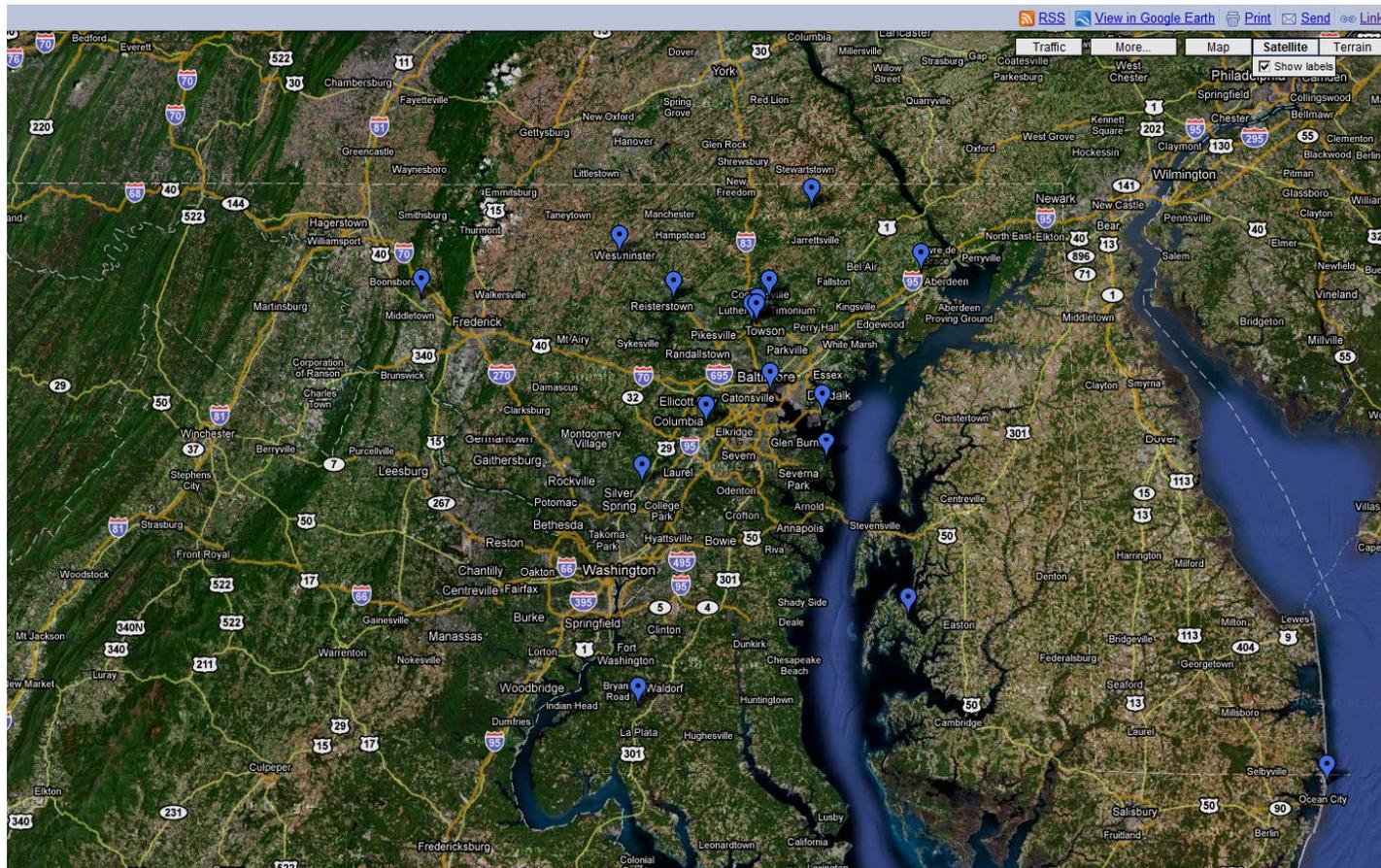
- Bird’s Eye View (rotated 180 degrees):



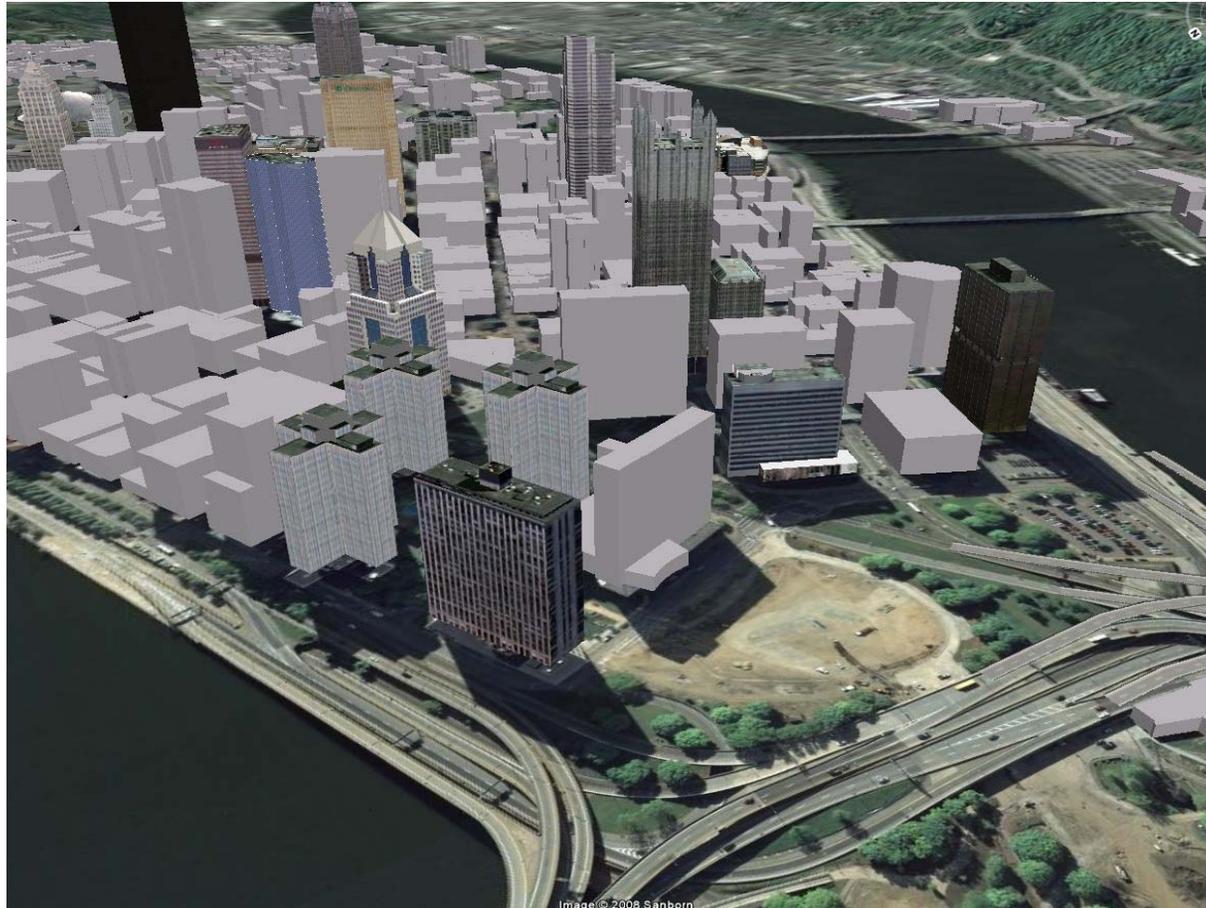
# Google Maps: “My Maps”

- Google Maps lets a user customize a map to plot points of interest. For a field manager, it could be the location of an interviewer and the location of a respondent
- Using the “My Maps” feature allows a field manager to be as efficient as possible when coordinating assignments and reviewing an interviewer’s efficiency and timesheets

# Google Maps: “My Maps” (cont.)



# 3-D View



# Drawbacks of Online Mapping Tools

- Driving directions provided are not always the most efficient routes between two points
- Driving directions in one online mapping tool may differ from directions in another
- Address information is not always accurate
- Poor coverage in rural areas

# Drawbacks of Online Mapping Tools (cont.)

- Level of detail varies



## Drawbacks of Online Mapping Tools (cont.)

- Customization features such as “My Maps” on Google can be inefficient when a large number of points need to be plotted in a small area
- Over reliance on online mapping tools can lead to poor decisions if the field manager does not use other sources of information and consider other variables in decision-making process

# Lessons Learned Using Online Mapping Tools

- Online mapping tools help a field manager to understand difficulties typically faced by interviewers, such as:
  - college dormitories
  - apartment complexes
  - rural areas where dwellings are hard to find
  - urban areas with high rise buildings

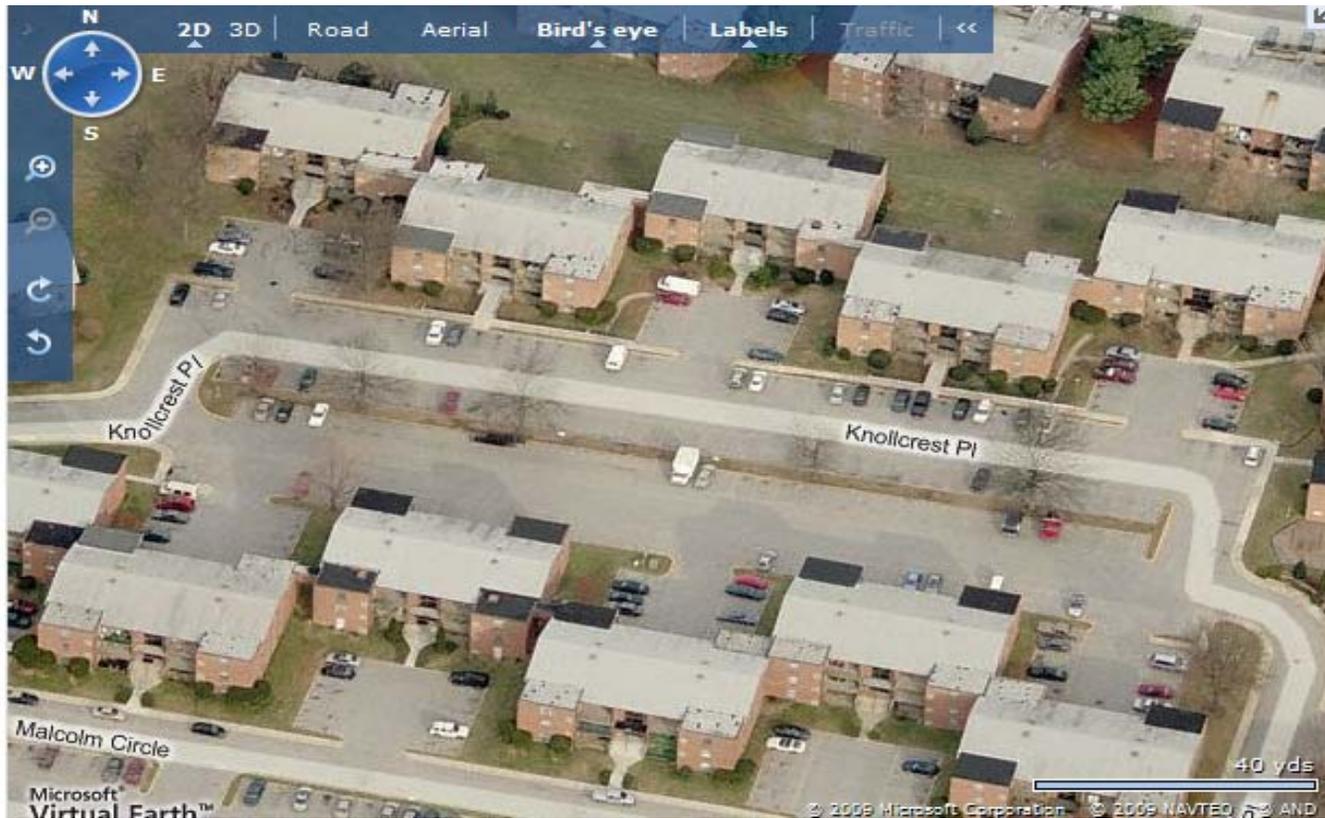
# Lessons Learned Using Online Mapping Tools (cont.)

- College dormitories



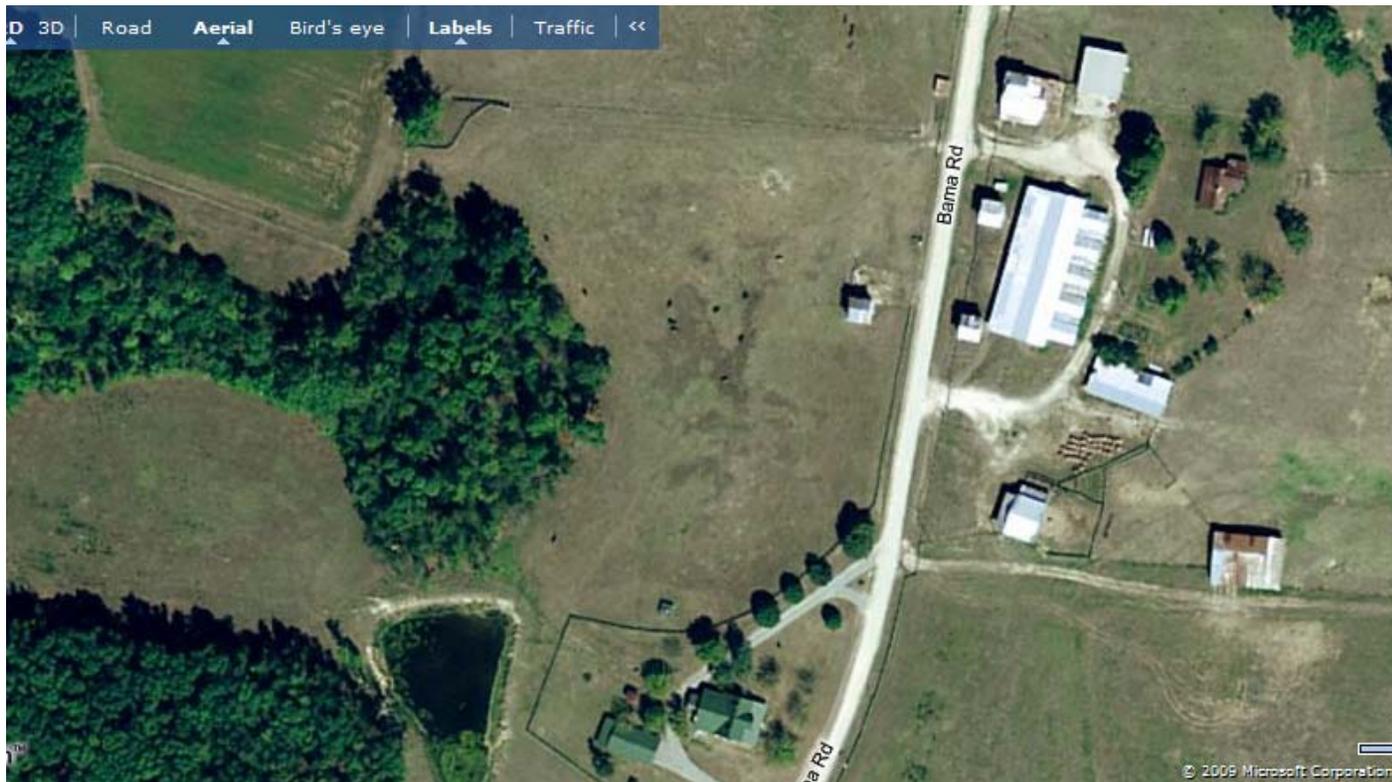
# Lessons Learned Using Online Mapping Tools (cont.)

- Apartment complexes



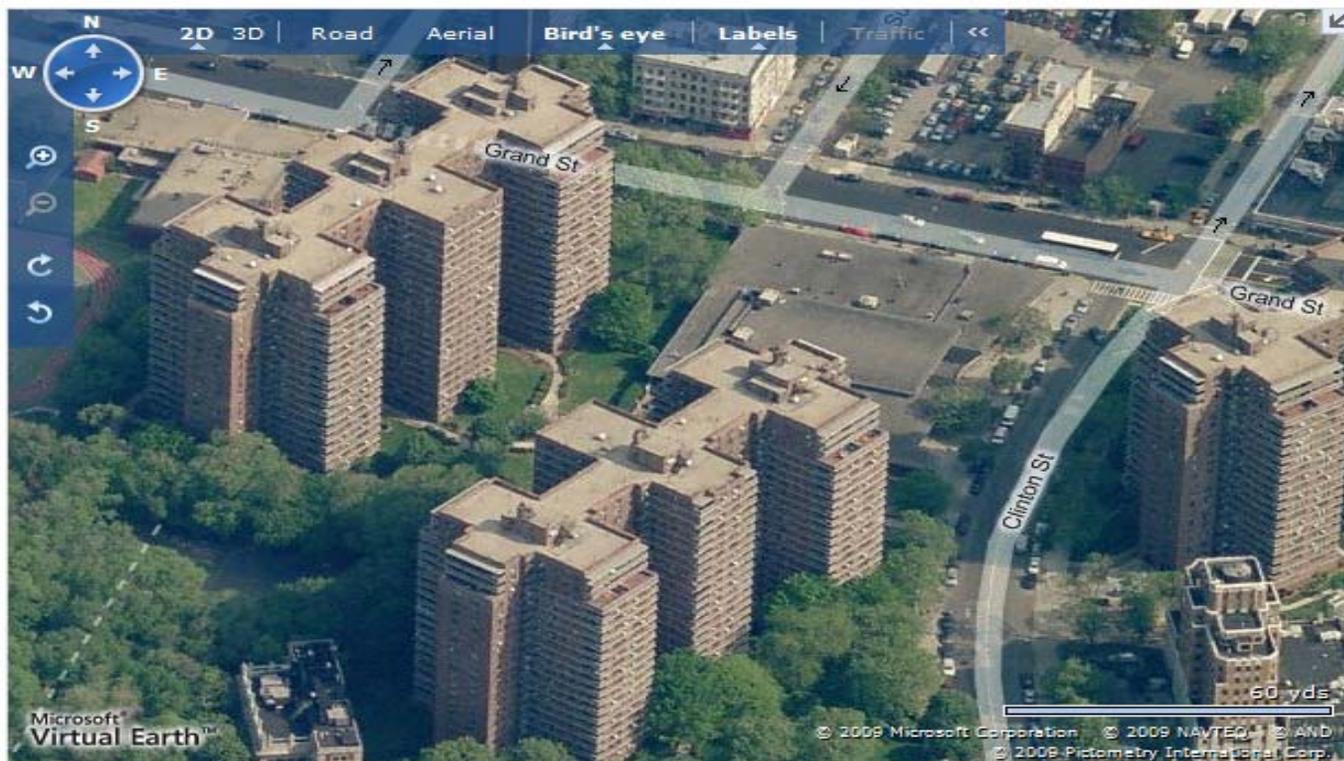
# Lessons Learned Using Online Mapping Tools (cont.)

- Rural Areas



# Lessons Learned Using Online Mapping Tools (cont.)

- Urban areas with high rise buildings



# Lessons Learned

## Using Online Mapping Tools (cont.)

- Managers can use online mapping tools to make an informed decision about issues such as:
  - barriers to access
  - best routes to travel
  - deciding which interviewer to send to an area

# Lessons Learned

## Using Online Mapping Tools (cont.)

- Allow interviewer and field manager to anticipate problems prior to sending interviewer to location
- Provide field managers with the ability to customize in order to fit their needs
- Very useful for counting and listing

# Lessons Learned

## Using Online Mapping Tools (cont.)

- Time spent identifying problems and developing solutions can be minimized, which will save money
- Allow field managers to both plan the most efficient route and determine if interviewers are traveling the most efficient routes and identify possible instances of falsification of time sheets and mileage

# Lessons Learned

## Using Online Mapping Tools (cont.)

- Field managers will need to be careful to make sure that they are not basing their decisions entirely on the information gleaned from using these online mapping tools
- In some instances online mapping tools give a false impression of an area because the aerial images are outdated or do not provide enough detail to give a manager the information they are seeking

# Lessons Learned

## Using Online Mapping Tools (cont.)

- Online mapping tools customization features can be cumbersome and time consuming when large amounts of information needs to be entered
- For example, if one needed to plot multiple points in a small geographic area, the points may become hard to distinguish from one another which can lead to errors

# Conclusions

- Online mapping tools are excellent free resources that are available to field managers and interviewers to help them do their jobs more efficiently
- Online mapping tools can help to save resources by minimizing time spent solving problems and identifying instances of possible falsification

## Conclusions (cont.)

- While these tools are certainly helpful, there are drawbacks to using them and a field manager needs to be aware of them
- The time and resources that can be saved by using online mapping tools make it worth dealing with the drawbacks
- The technology is rapidly evolving and they will be used more frequently on field studies in the future

## Conclusion (cont.)

- Online mapping tools help a manager to make informed decisions, but their experience as managers, knowledge of a particular area, and knowledge of the strengths and weaknesses of their interviewees are still the most important tools a manager possesses

# For More Information

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- RTI IFDTC website - [www.rti.org/ifdtc](http://www.rti.org/ifdtc)