ZIP Code Update Project

TOPICS

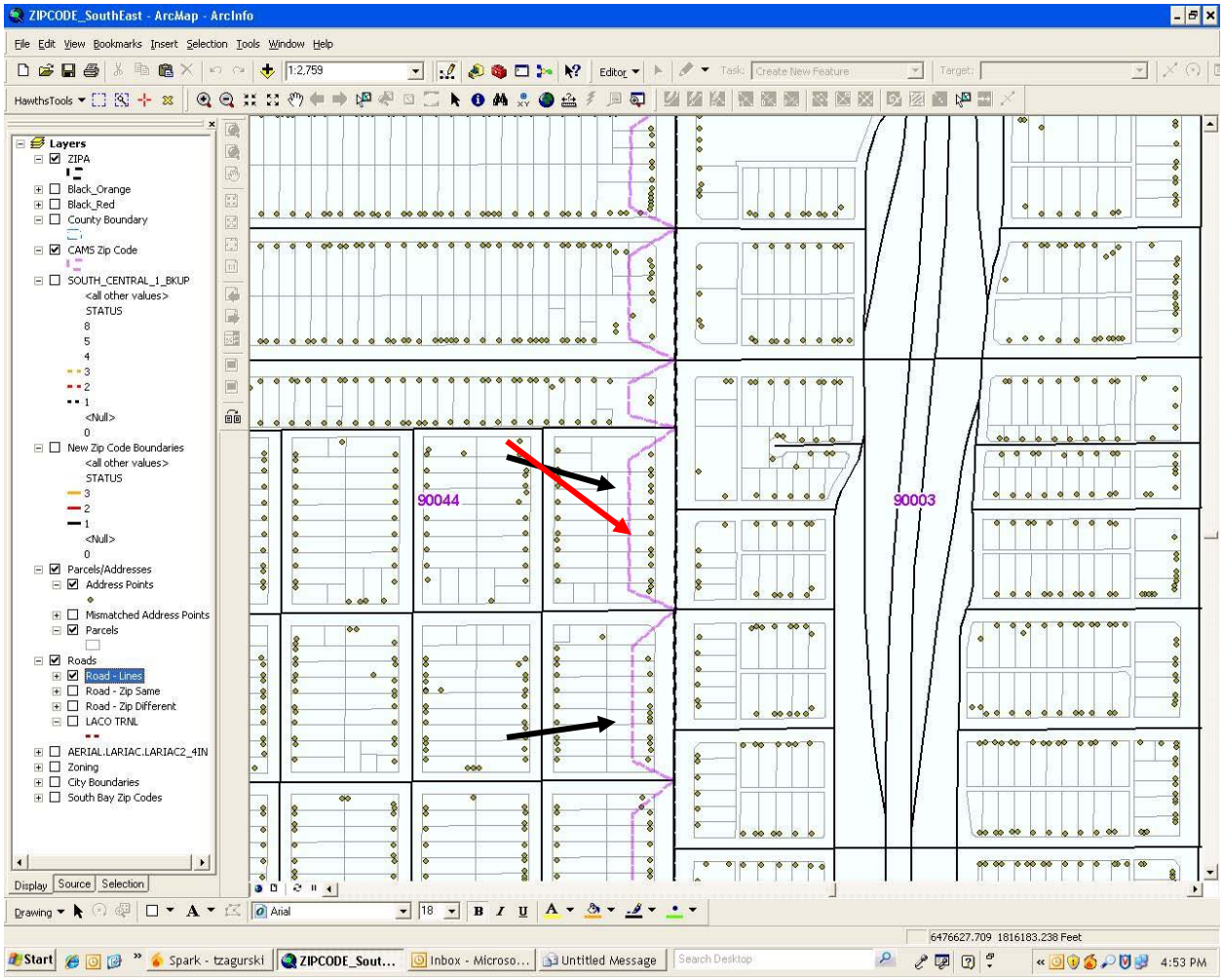
- Problems with existing ZIP Code layers
- Requirements for new ZIP Code layer
- Go over the Process of creating new ZIP Codes
- What’s Next

PROBLEM

- **Existing ZIP Code layers created for their own specific purpose**

  - Thomas Brothers ZIP Code
  > Has accuracy issues

  - CAMS ZIP Code
  > Captures streets/addresses
  > Cuts parcels



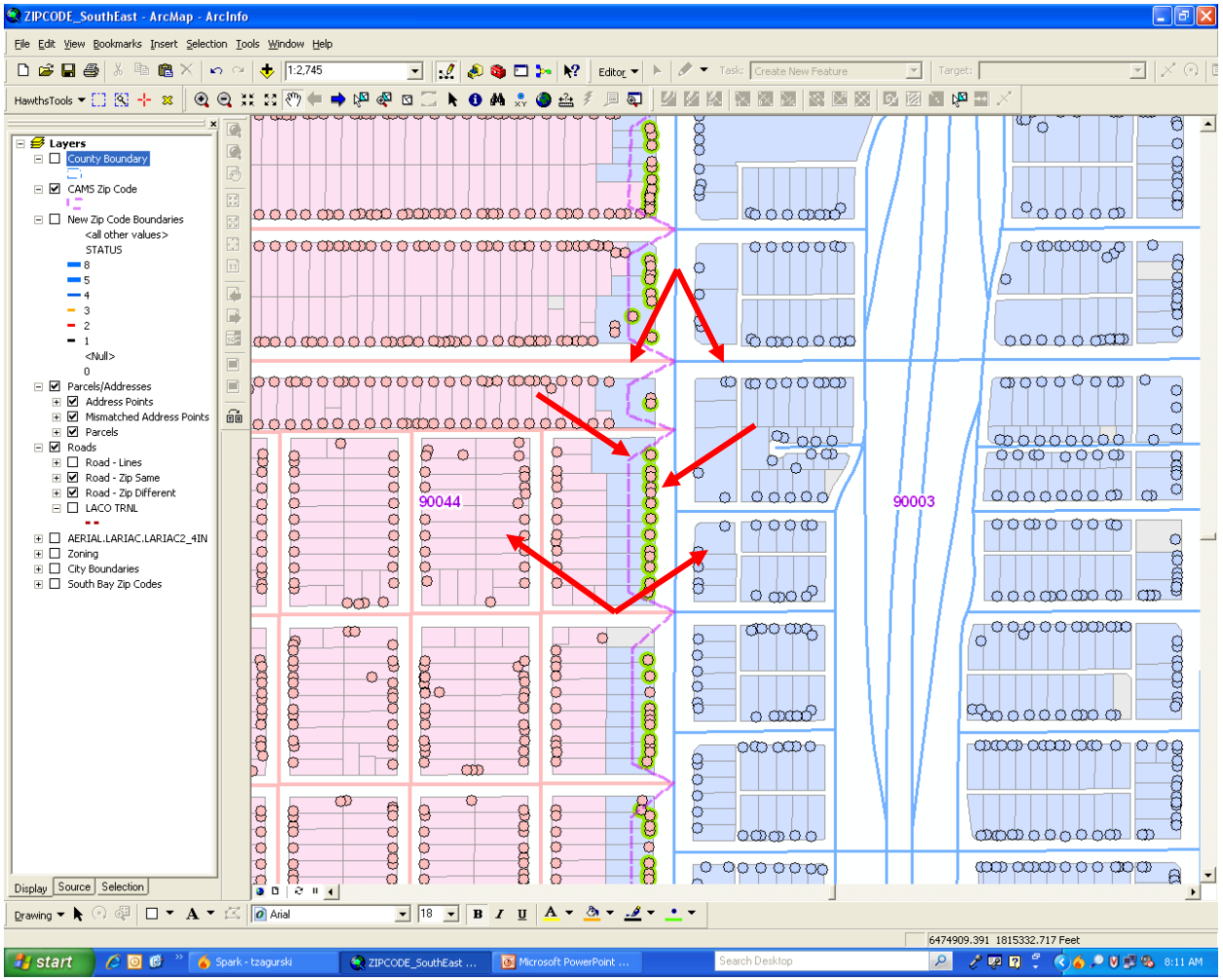
REQUIREMENTS

Create ZIP Code layer that would serve everyone's needs

- **Follow parcel boundaries**
  - **(Parcel Specific) – replacing Thomas Brothers layer**
- **When necessary, cut through parcels with multiple addresses in two ZIP Codes**
- **Not cut streets but attach at their endpoints**
  - **(Parcel/Street Specific) – replacing CAMS layer**
    - **Verifying Voter Addresses**
    - **Emergency Response**
- **Accurate and cartographically appealing**

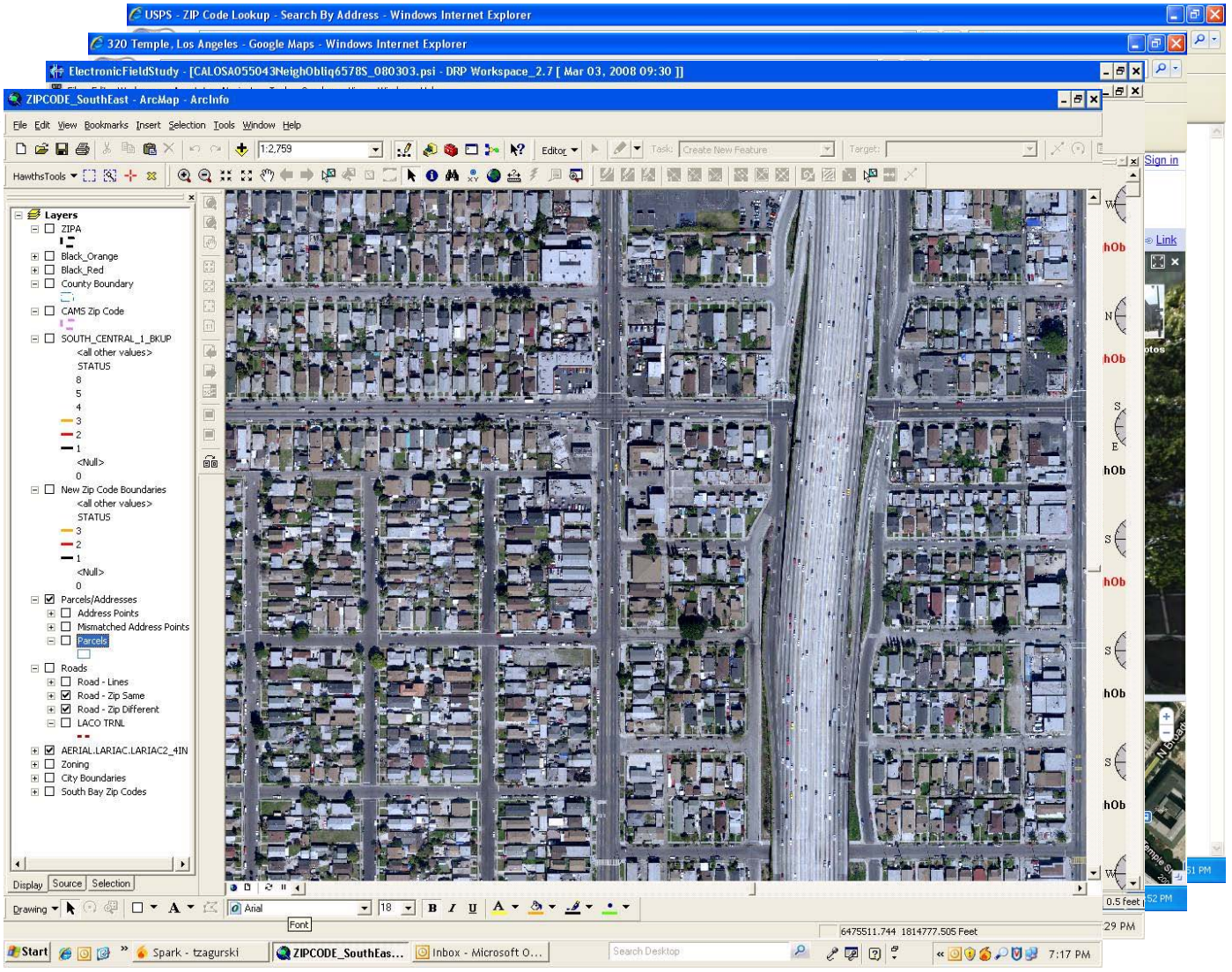
BACKGROUND - WORKING DATASETS

- **Assessor Parcels – shaded by ZIP Code**
- **CAMS address points – shaded by ZIP Code**
- **Located “mismatched” address points – used as an indicator**
- **CAMS DIME file (streets) – shaded by ZIP Code**
- **Existing CAMS ZIP Code layer**



ADDITIONAL DATA SOURCES

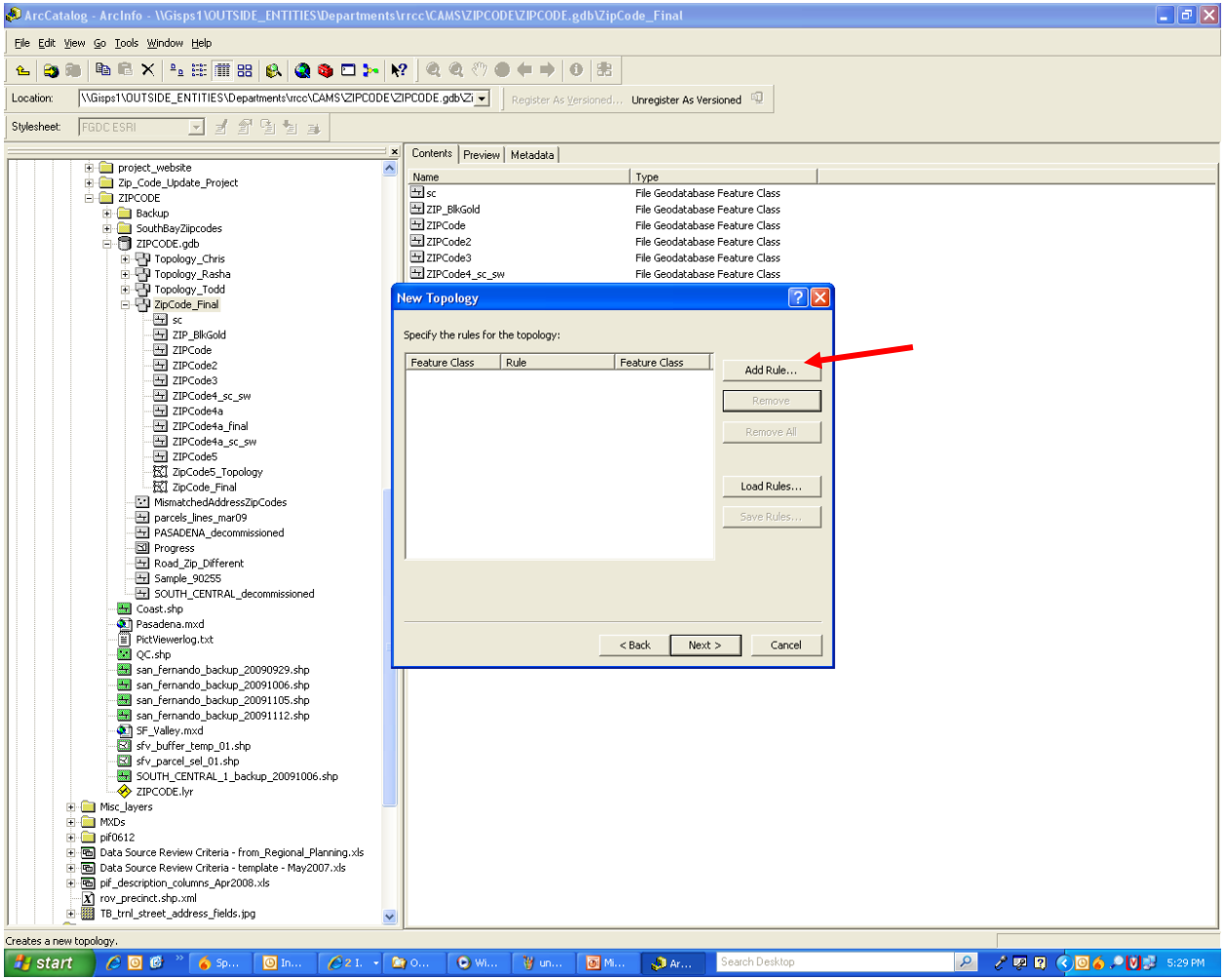
- **USPS ZIP Code Lookup**
- **Google Maps Streetview**
- **EFS Oblique Imagery**
- **Ortho Imagery**



PROCESS

SETTING UP THE WORKING ENVIRONMENT

- **Personal Geodatabase**
- **Create Topology**
  - **ArcCatalog**
  - **New topology interface**
  - **Set topology name / cluster tolerance**
  - **Feature class it references**
  - **Feature class rank (how much it moves when validated)**
  - **Add rules**



SETTING UP THE WORKING ENVIRONMENT

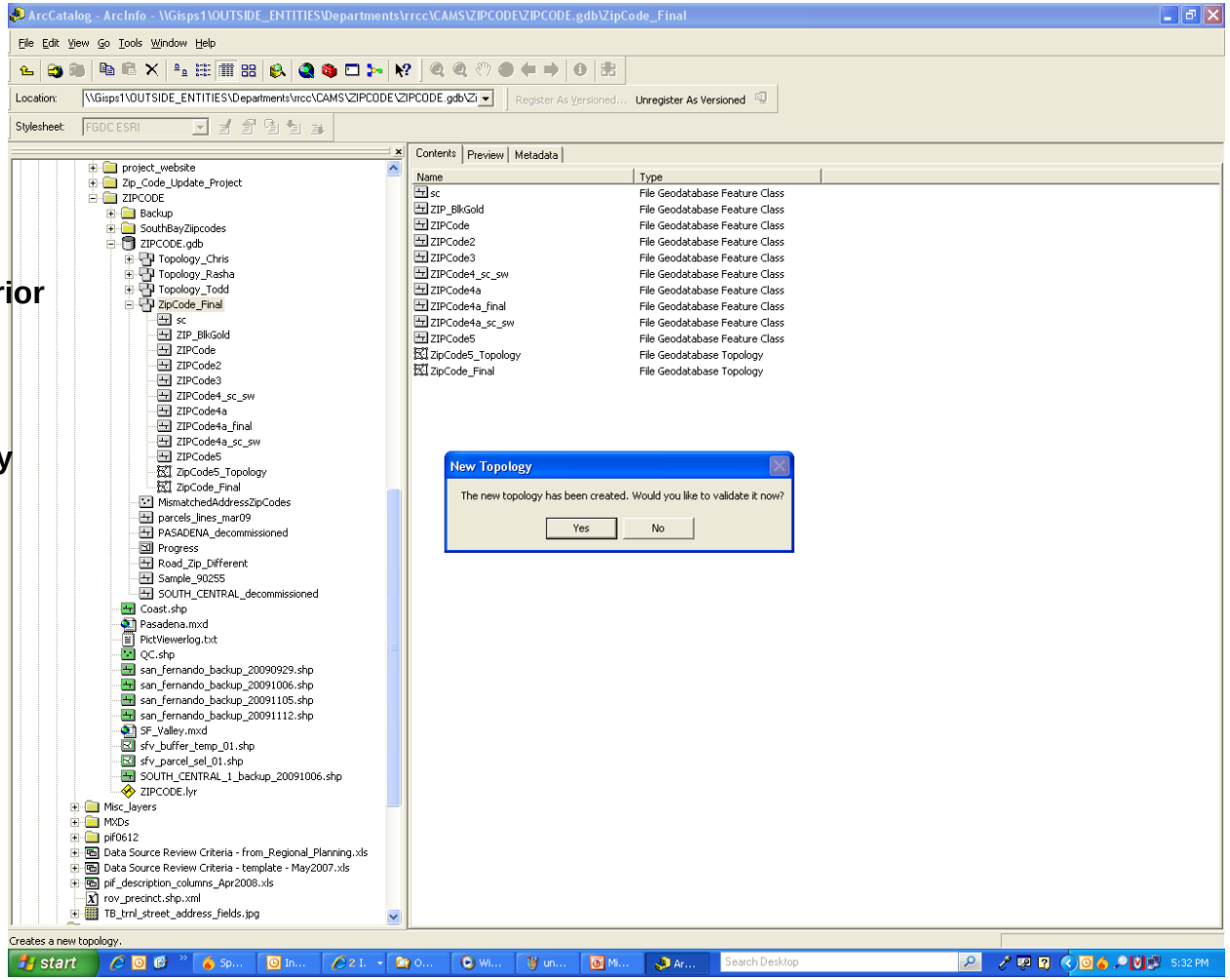
- **Select rule(s)**

- **Six rules**
  - **Must not overlap**
  - **Must not have dangles**
  - **Must not intersect**
  - **Must not intersect or touch interior**
  - **Must on self-intersect**
  - **Must be single part**

- **Click “Next” to generate summary**

- **Click “Finish” to create topology**

- **Finally asks to validate topology**



SETTING UP THE WORKING ENVIRONMENT

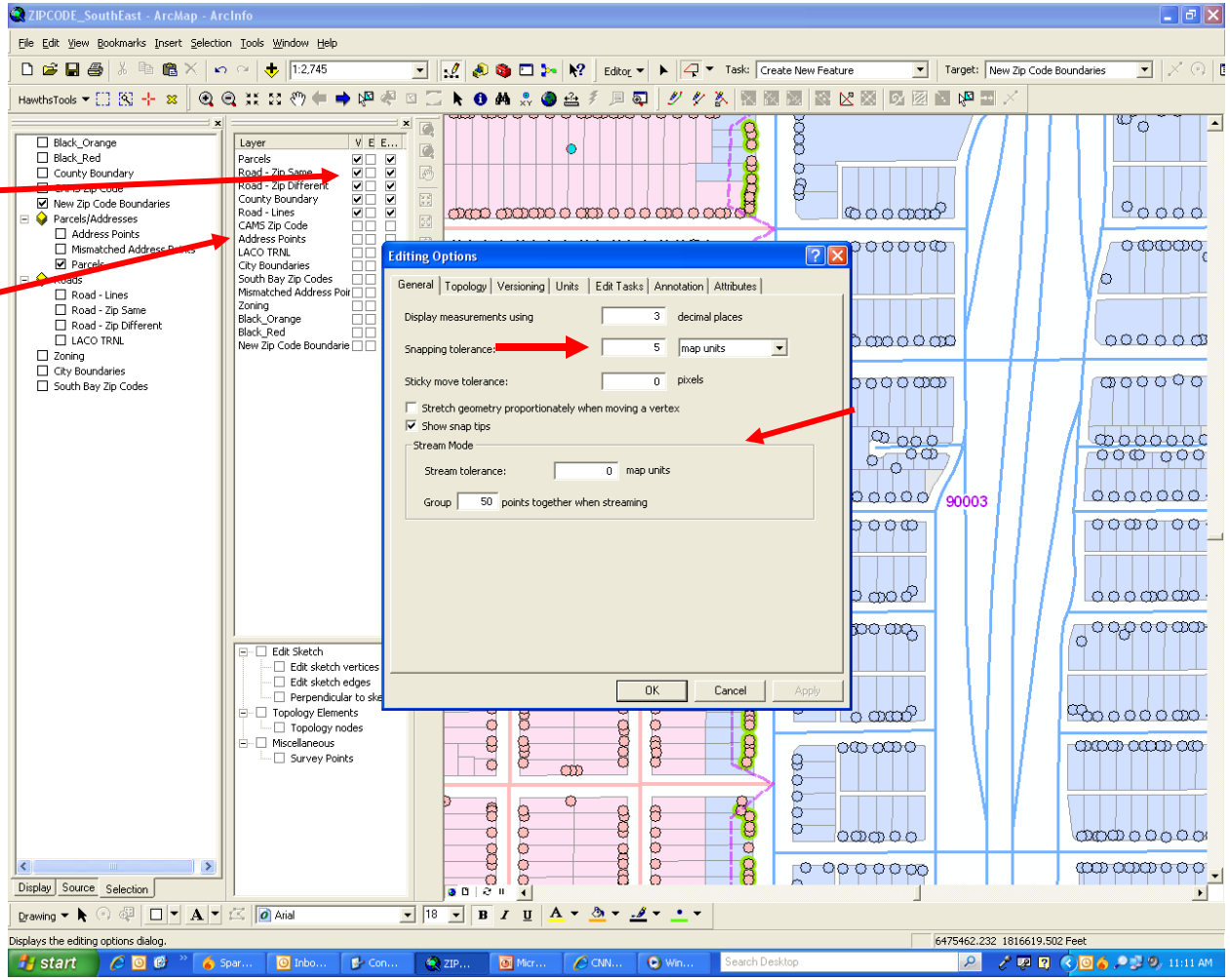
- **Set snapping environment**
- **Set feature snap agent (what linework snaps to)**

  Vertex
  Edge
  Endpoint

- **Set layer order for snapping importance**

  drag and drop

- **Set snapping tolerance**

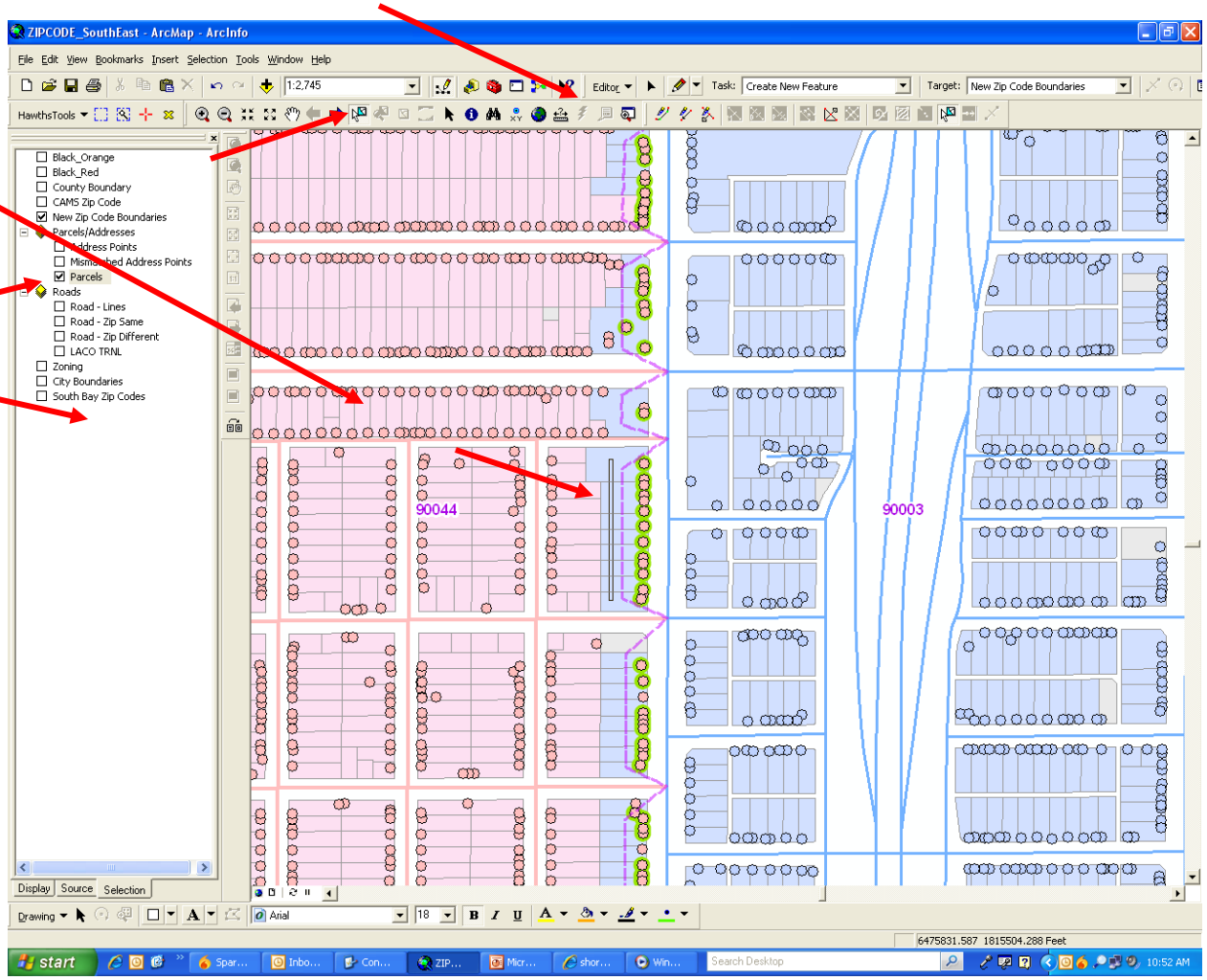


STARTING THE EDITING PROCESS

- **Begin editing process by selecting “Start Editing”**
- **Select location where file to edit resides**
- **Select the Target layer to edit**
- **Begin trace process**

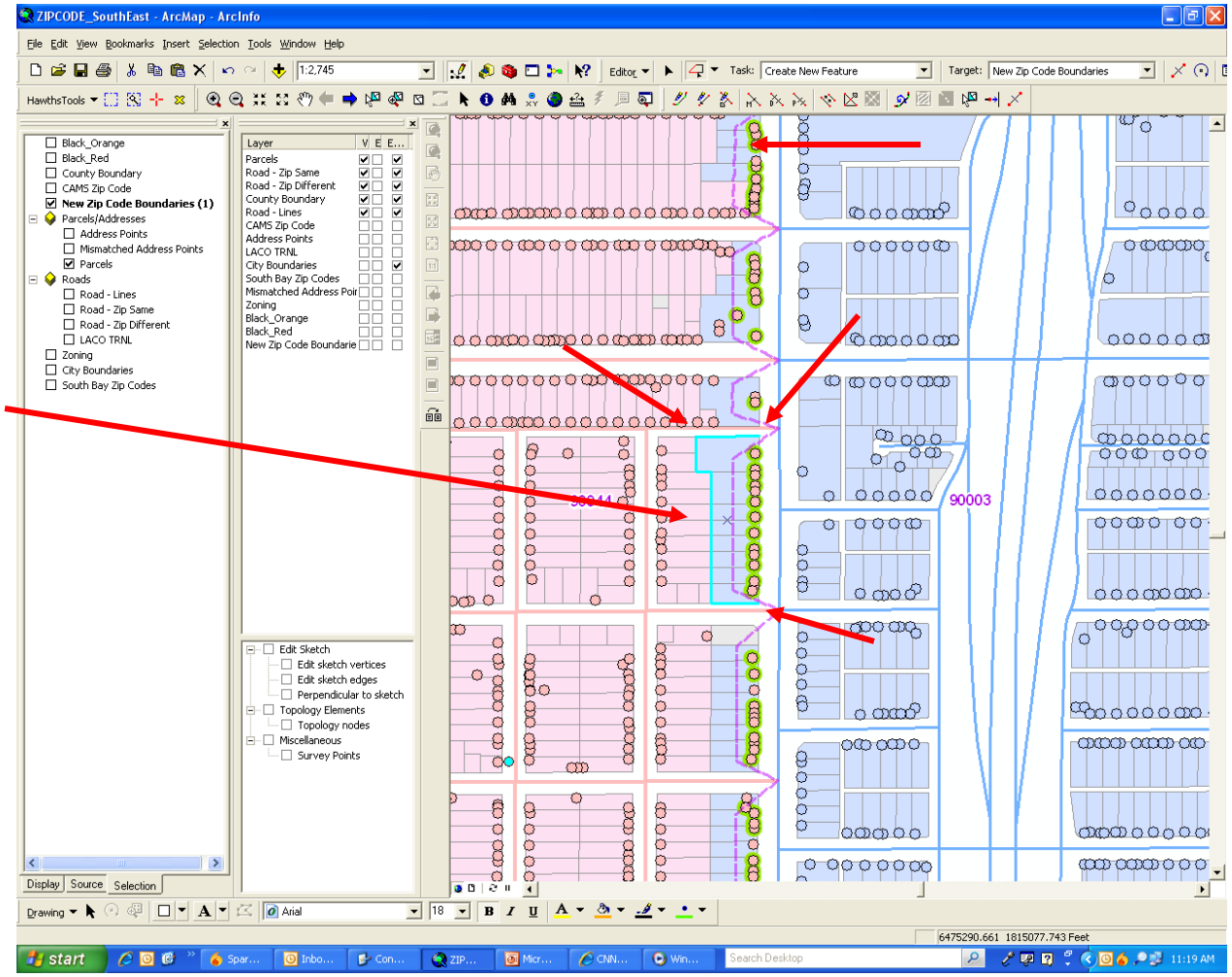
  Copy and pasting
  Moving vertices
  Tracing

- **Set selectable layer**
- **Grab select tool**
- **Select parcels to trace**



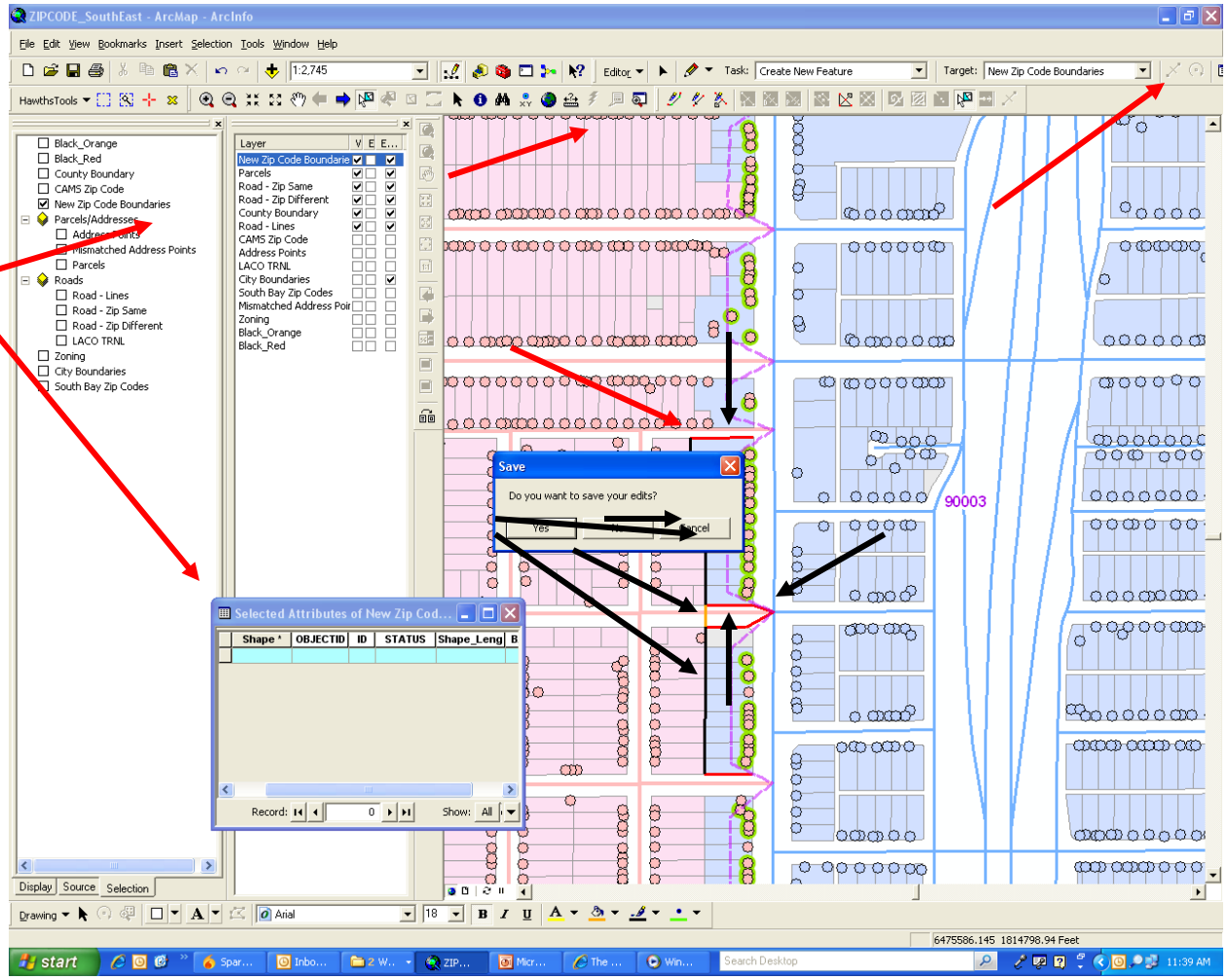
TRACE NEW FEATURE

- **Select Trace Tool**
- **Position cursor on starting point (parcel vertex)**
- **Click, hold and drag**
- **Stop at the endpoint vertex and click to finish**
- **ArcMap quickly shows all new vertex points added in the arc**
- **ArcMap then shows newly created line in select mode**



SPLIT FEATURES AND ADD ATTRIBUTES

- With the newly created arc selected, grab split tool
- Position cursor on vertex and click to split
- Open the attribute table for the layer being edited and code the features
- Verify that the features have been coded correctly
- Repeat the process
- Add additional features to connect the arcs
- Stop editing
- Save edits



BOUNDARY CREATION

- **New ZIP Code layer have boundaries arcs coded as:**

  1 – Shared arc (black)
  2 – Street arc (red)
  3 – Parcel arc (orange)

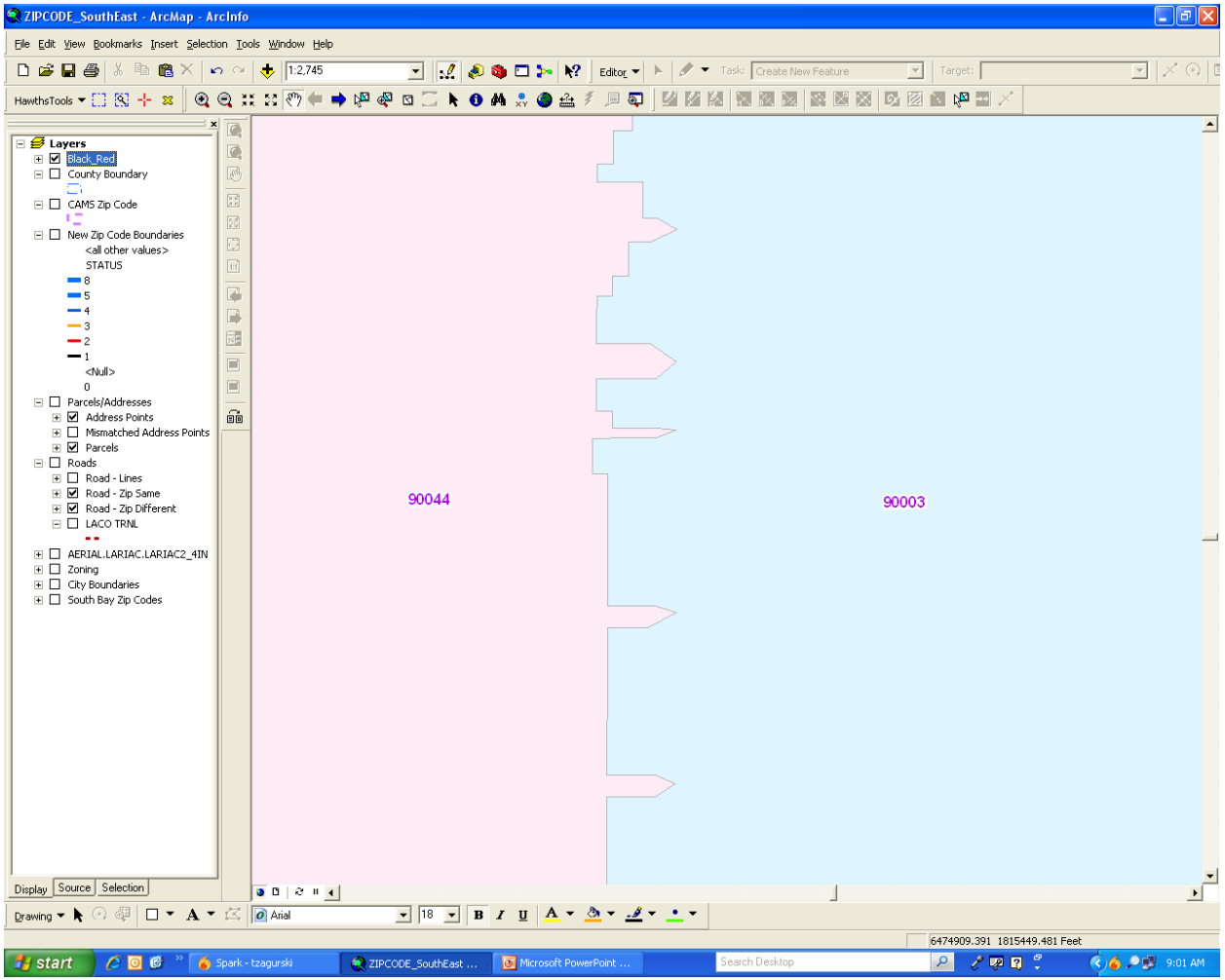
  Allows for two replacement layers to be created

  1, 3 – Thomas Brothers
  1, 2 – CAMS

- **Run definition query to get the Thomas Brothers replacement layer (Parcel Specific)**

- **Build polygons and add attributes**

- **Repeat the process to get the CAMS replacement layer (Parcel/Street Specific)**



WHAT'S NEXT

- Anticipate it being ready in approximately one month
- Place it on eGIS website
- Layer will need to be updated!!
- Regional Planning will maintain layer
- Work with Post Office
- Questions?