



# NC Geographic Information Coordinating Council Working Group for Building Footprints

Business Plan Recommendations  
August 17, 2022

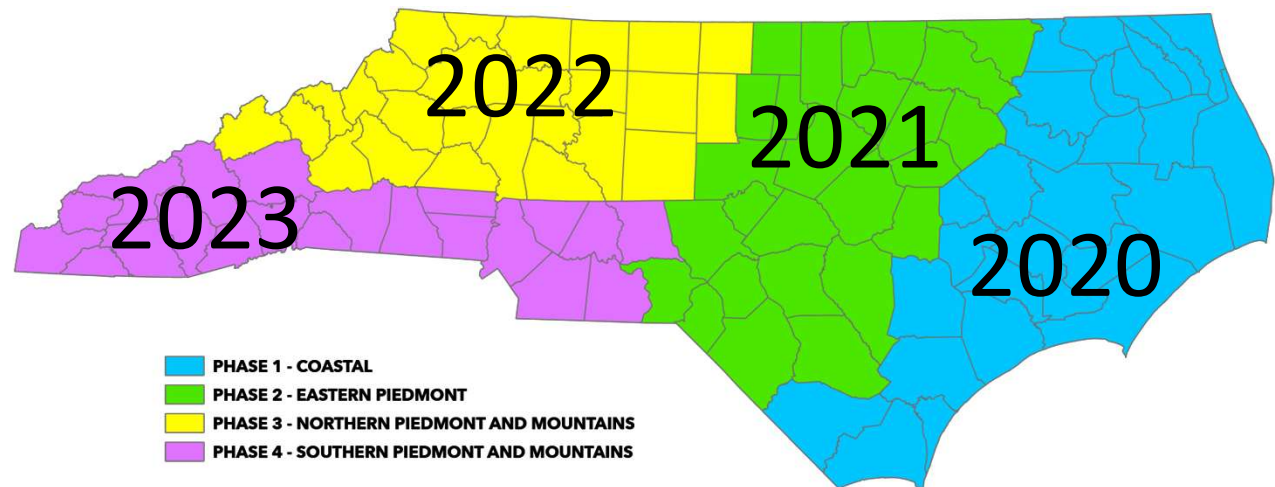
# Working Group for Building Footprints Timeline



## Working Group for Building Footprints Summary of Recommendations

### 1. Align schedule with and derive data from the 911 Board statewide orthoimagery annual phase

- A quarter of the state is updated each year that maximizes pace with growth
- Establishes a maintenance schedule for keeping this valuable dataset current
- Orthoimagery is high resolution directly related to precision and accuracy



## Working Group for Building Footprints Summary of Recommendations

### 2. Maximize Artificial Intelligence and Deep Learning technologies for feature extraction

- The technology is proven and demonstrated by ESRI and federal agencies
- Will substantially reduce the traditional manual labor level of effort



## **Working Group for Building Footprints Summary of Recommendations**

**3. Evaluate three approaches to contracting, roles, and responsibilities to include a combination of federal, state, and/or private contractors. Recommendation is to engage federal collaborators for initial processing and extraction**

- Federal agency computing and processing resources will substantially reduce schedule
- Yields a mutually beneficial return as the high-resolution North Carolina solution is integrated with national products

**1. FEDERAL AND STATE  
PARTNERSHIP**

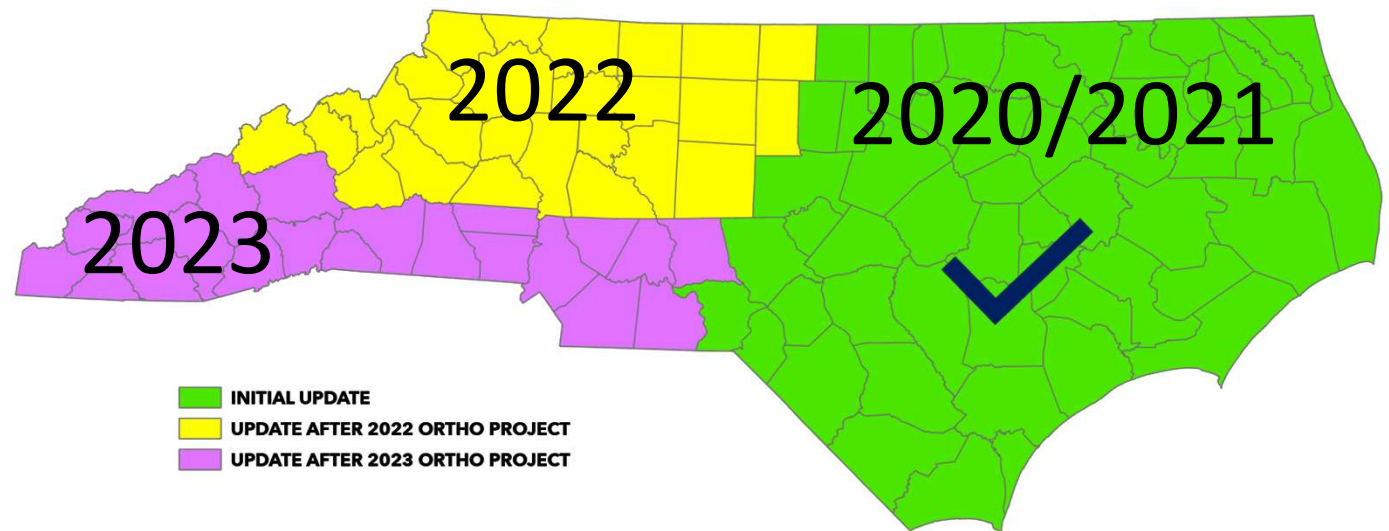
**2. STATE CLOUD  
COMPUTING RESOURCES**

**3. PRIVATE CONTRACTORS**

## Working Group for Building Footprints Summary of Recommendations

4. Consider two options as (1) initiate the Coastal and Eastern Piedmont or (2) perform a statewide initial update. Option 1 is the recommended approach

- The costal and piedmont phases are complete
- Serves as a benchmark for lessons learned basis and potential for reduced effort on the western half of the state
- Maintenance follows the cycle and sets end-user scheduling expectations



## Working Group for Building Footprints Summary of Recommendations

### 5. Stakeholders identified a common set of attributes for high priority updates

- Can be derived from Parcels and Tax Records
- Provides a precedent for agencies to develop custom requirements for their own internal applications, workflows, and funding

Highest Demand

ITEM	POTENTIAL SOURCE	DESCRIPTION
BLDG_ID	Generated	Primary key
PAR_ID	Statewide Parcels	Tax Parcel Identification Number.
OCC_TYPE	Statewide Parcels	Occupancy Type e.g., single family, religious, industrial, mobile, multifamily, etc.
ADDRESS	AddressNC	911 Address
BUILD_TYPE	Statewide Parcels	HAZUS Building Construction Type i.e., wood, steel, concrete, etc.
YEAR_BUILT	Statewide Parcels	Year the structure was built.
HTD_SQ_FT	Statewide Parcels	Heated square footage.
NUM_STORY	Statewide Parcels	Number of stories.
IMAGE_YEAR	NC Orthoimagery	The year that the imagery was flown from which the building footprint was derived.
REMOVED	Generated	Has this building been removed
REMOVED_YR	Generated	Year in which the structure was removed.

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