

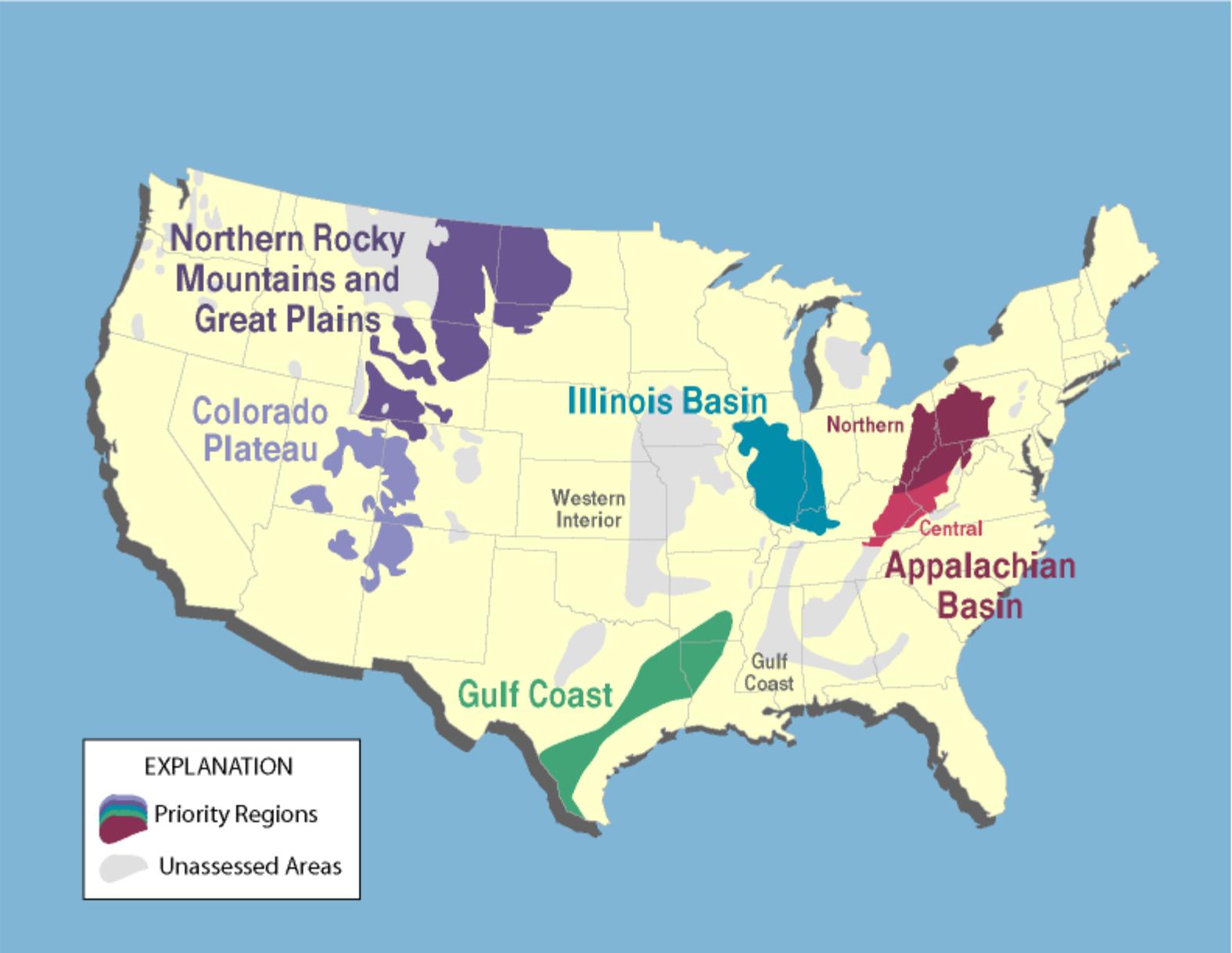
U.S. Geological Survey

Digitized maps used in coal resource/reserve evaluations:

National Coal Resource Assessment

Coal Availability/Coal Recoverability

USGS usually works closely with the State Surveys for these covers



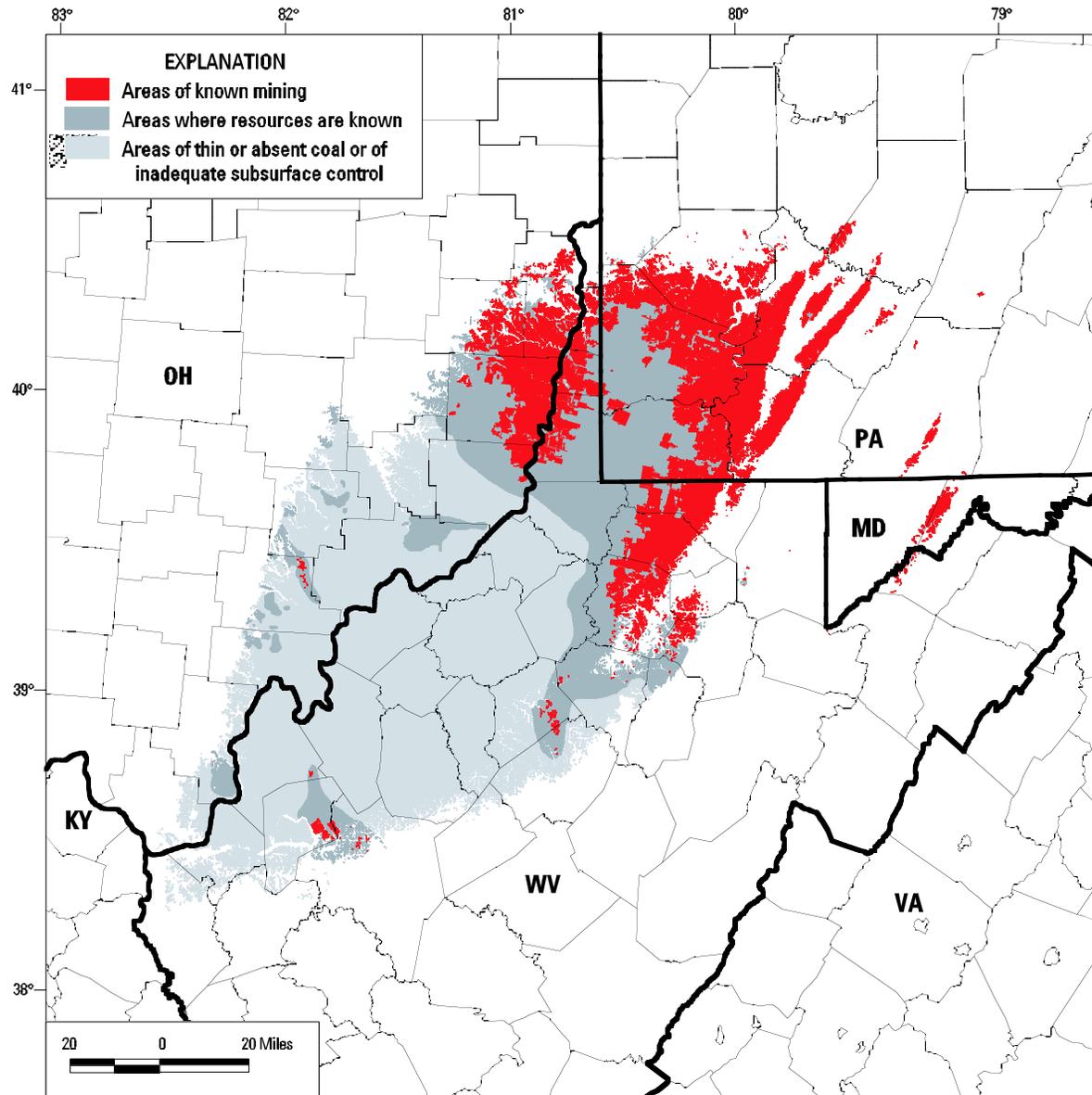
GIS attributes for NCRA mine coverages

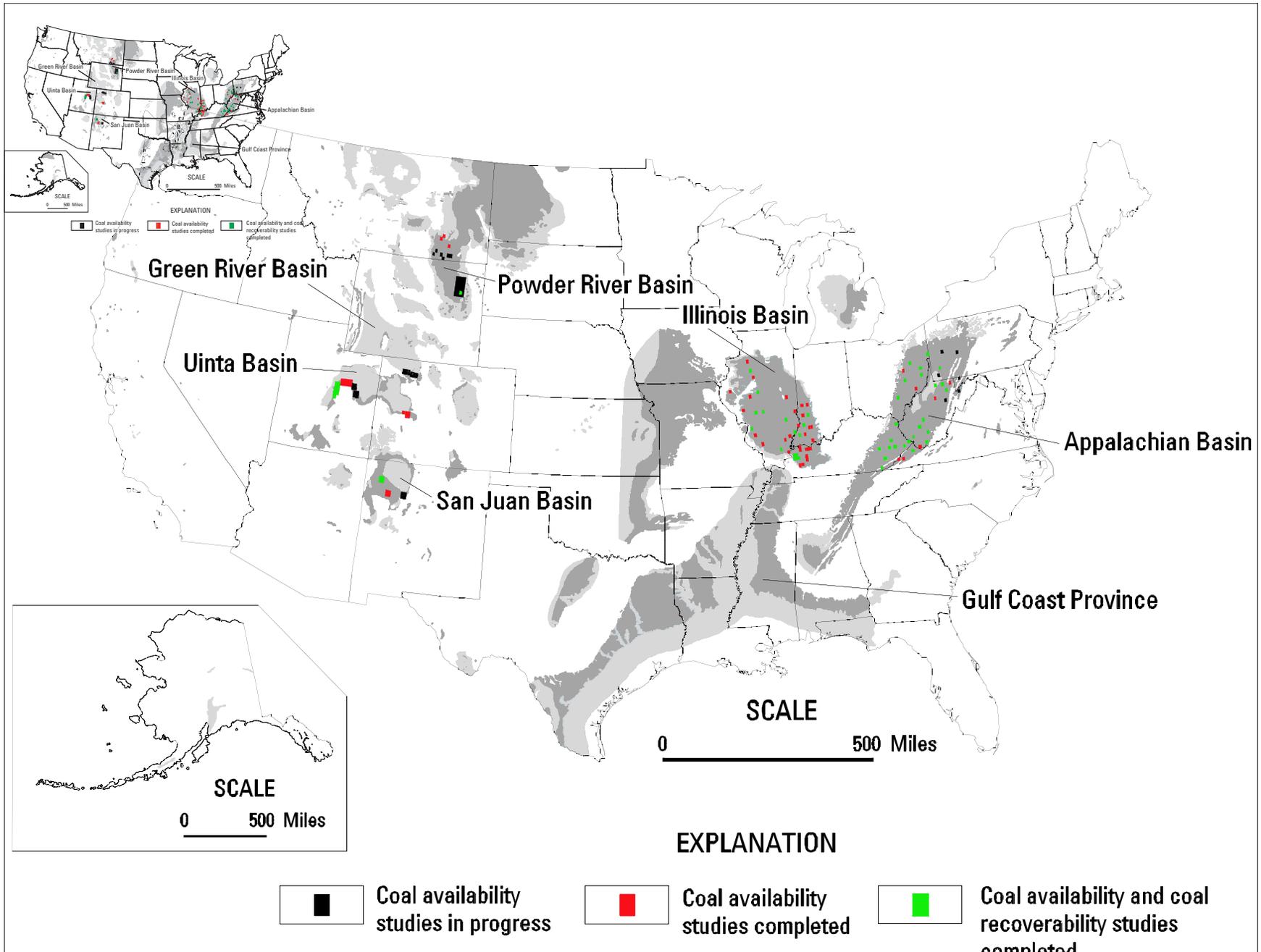
- Mined/unmined differentiation (numeric code or yes/no...)
- Mine method (surface, underground, etc; often incorporated into previous attribute)
- Mine name (for mine area or permitted area)
- Identification number or pit number
- Mining dates or status
- Leased areas
- **NOTE: ONLY FIRST ONE IS COMMON, BUT STILL NOT IN ALL FILES.**

Source scale or limitation on NCRA mined areas

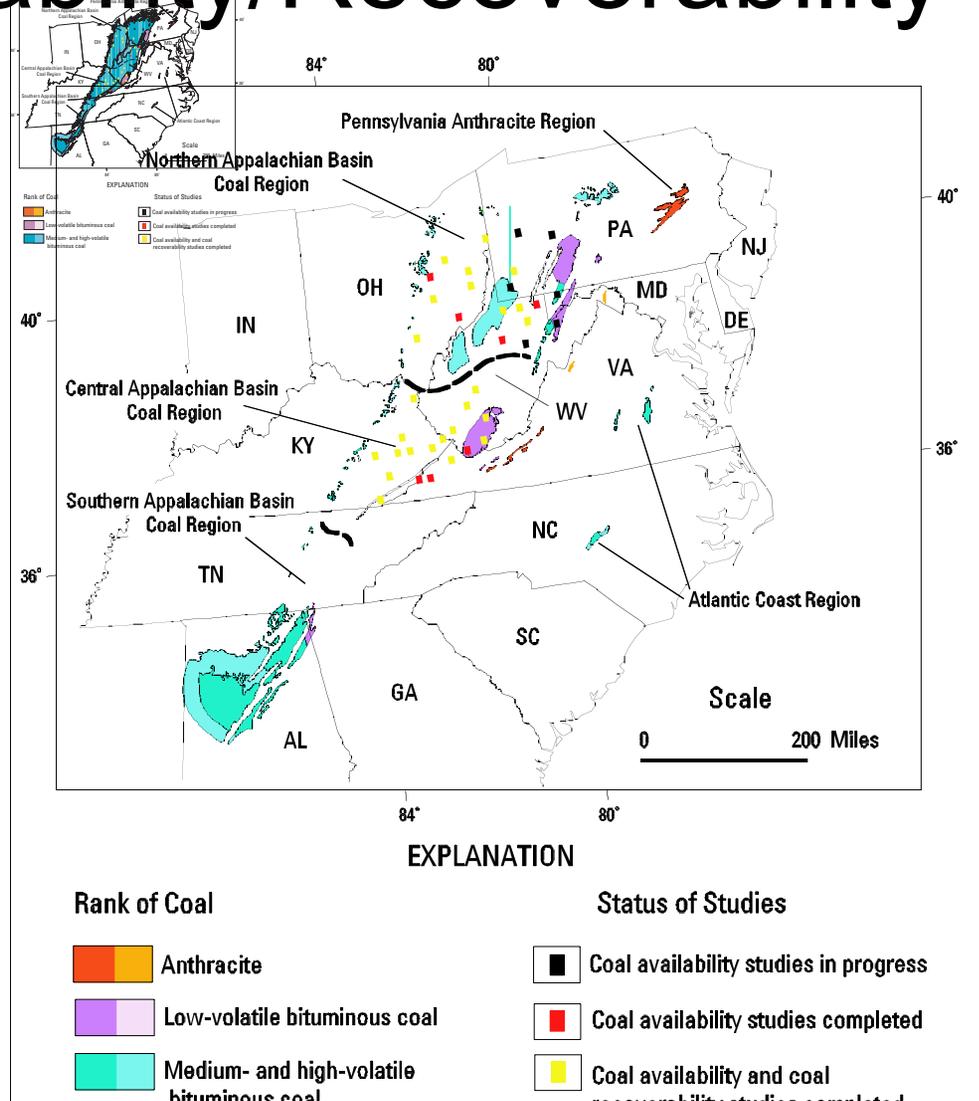
- Illinois Basin
 - 1:12,000 to 1:100,000 (in State files)
- Colorado Plateau
 - Varies (1:24,000 most common)
- Rocky Mountains & N Great Plains
 - (no scale limitation noted in metadata)
- Appalachian
 - 1:24,000 to 1:5,000,000 in same coverage
- Gulf Coast
 - 1:1,000 to 1:2,000,000 in same coverage

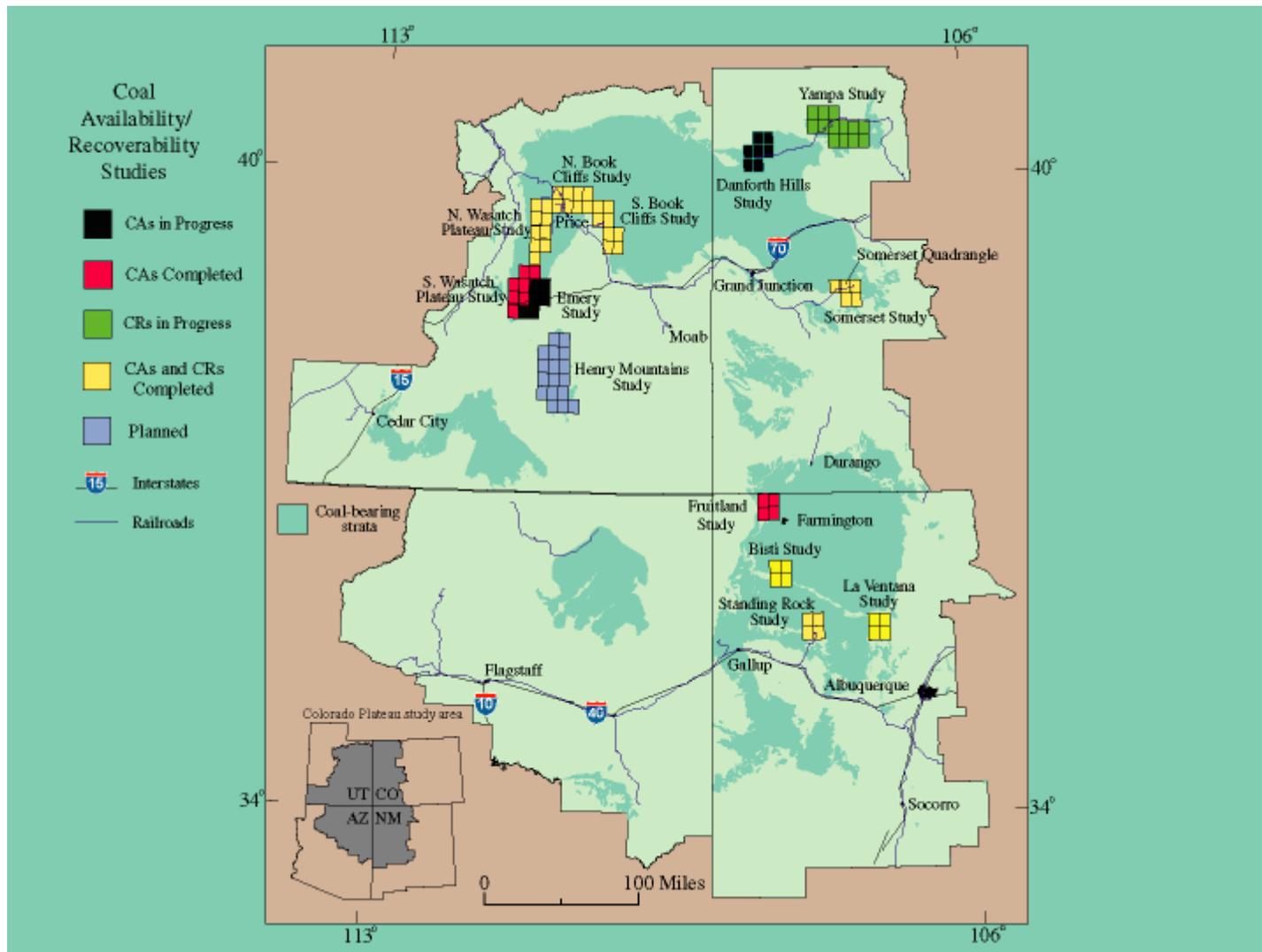
Appalachian Basin - Pittsburgh





Appalachian Coal Availability/Recoverability Studies





Other Data Available

- USGS Minerals Program
 - Mine map preservation pgm – archiving and scanning
 - Efforts tied to research activities
 - Collections:
 - USBM Mine Map Repository
 - Defense Minerals Exploration Programs
 - Collections of company exploration records
- Oil and Gas GIS information?

Other Considerations

- Land surface covers important
 - Land ownership
 - Drainages
 - Easily available others – o&g well
- Need for one db that contains mine locations

