

KY Dept. for Environmental Protection Division for Air Quality

Presentation to: **Kentucky's Regional Air Quality
Conference**

April 24, 2008

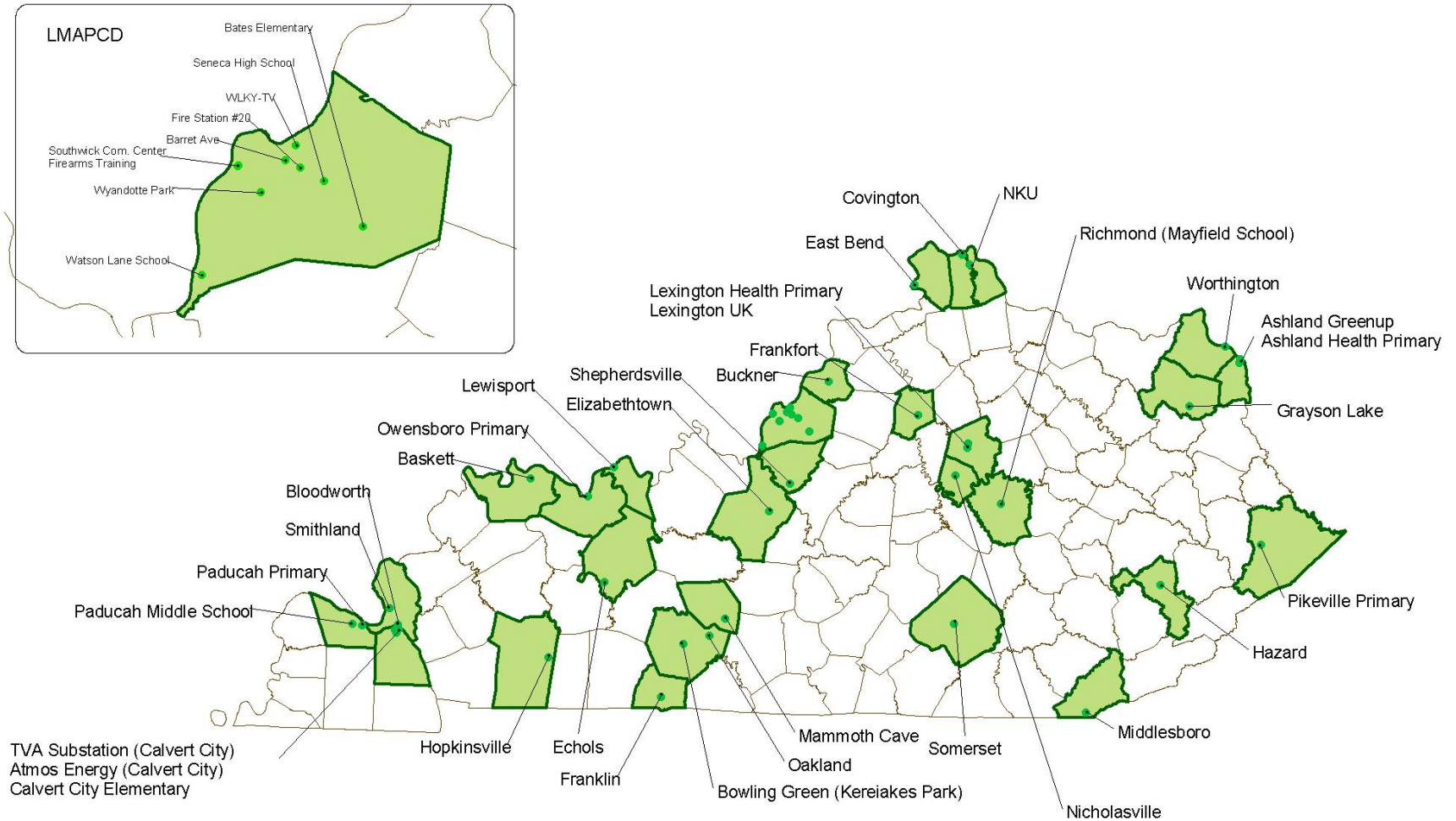
**Department for Environmental Protection
Environmental & Public Protection Cabinet**



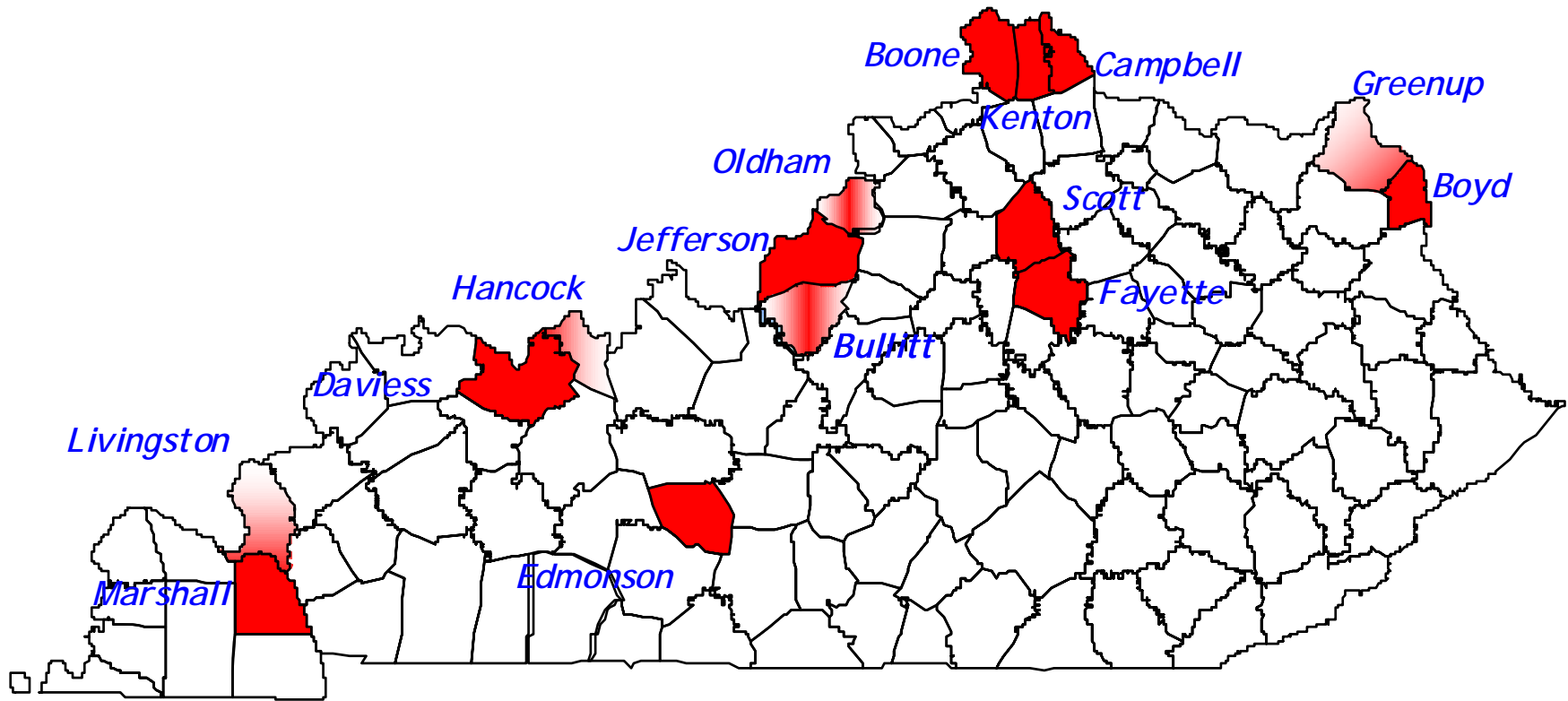
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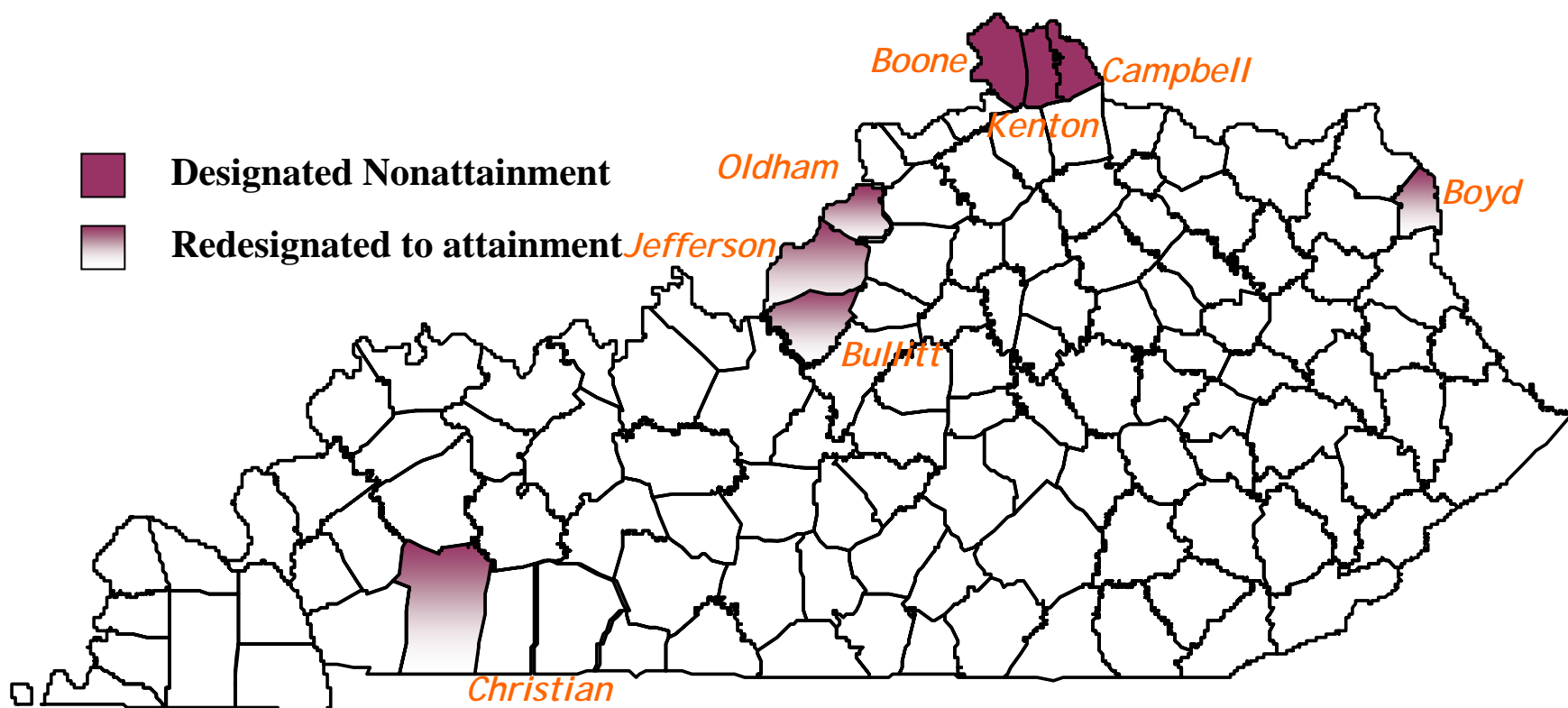
KYDAQ Monitoring Network



Previous 1-Hr Ozone Standard (.125 ppm)



Existing 8-Hr Ozone Standard (.085 ppm)



New 8-Hour Ozone Standard

- On March 12, 2008, EPA significantly strengthened its national ambient air quality standards (NAAQS) for ground-level ozone, the primary component of smog.
- EPA is revising the 8-hour “primary” ozone standard, designed to protect public health, to a level of 0.075 parts per million (ppm). The previous standard, set in 1997, was 0.08 ppm. Because ozone is measured out to three decimal places, the standard effectively became 0.084 ppm as a result of rounding.



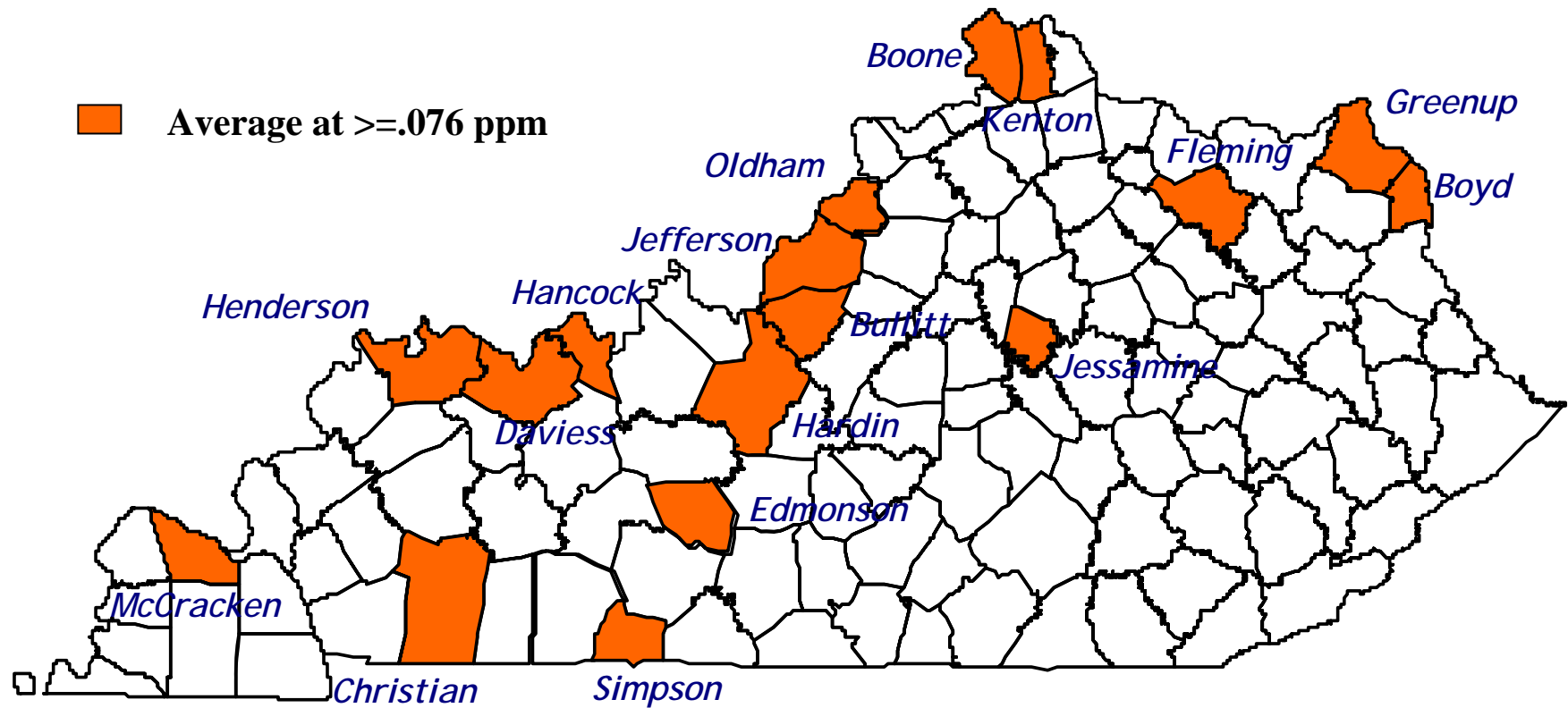
New 8-Hour Ozone Standard cont'

- In addition to changing the level of the standards from 0.08 ppm to 0.075 ppm, EPA is now specifying the level of the standard to the third decimal. An area will meet the revised standards if the three-year average of the annual fourth-highest daily maximum 8-hour average at every ozone monitor is less than or equal to the level of the standard (i.e., 0.075 ppm).
- EPA would like to propose the implementation rule for this standard in the Fall of 2008.

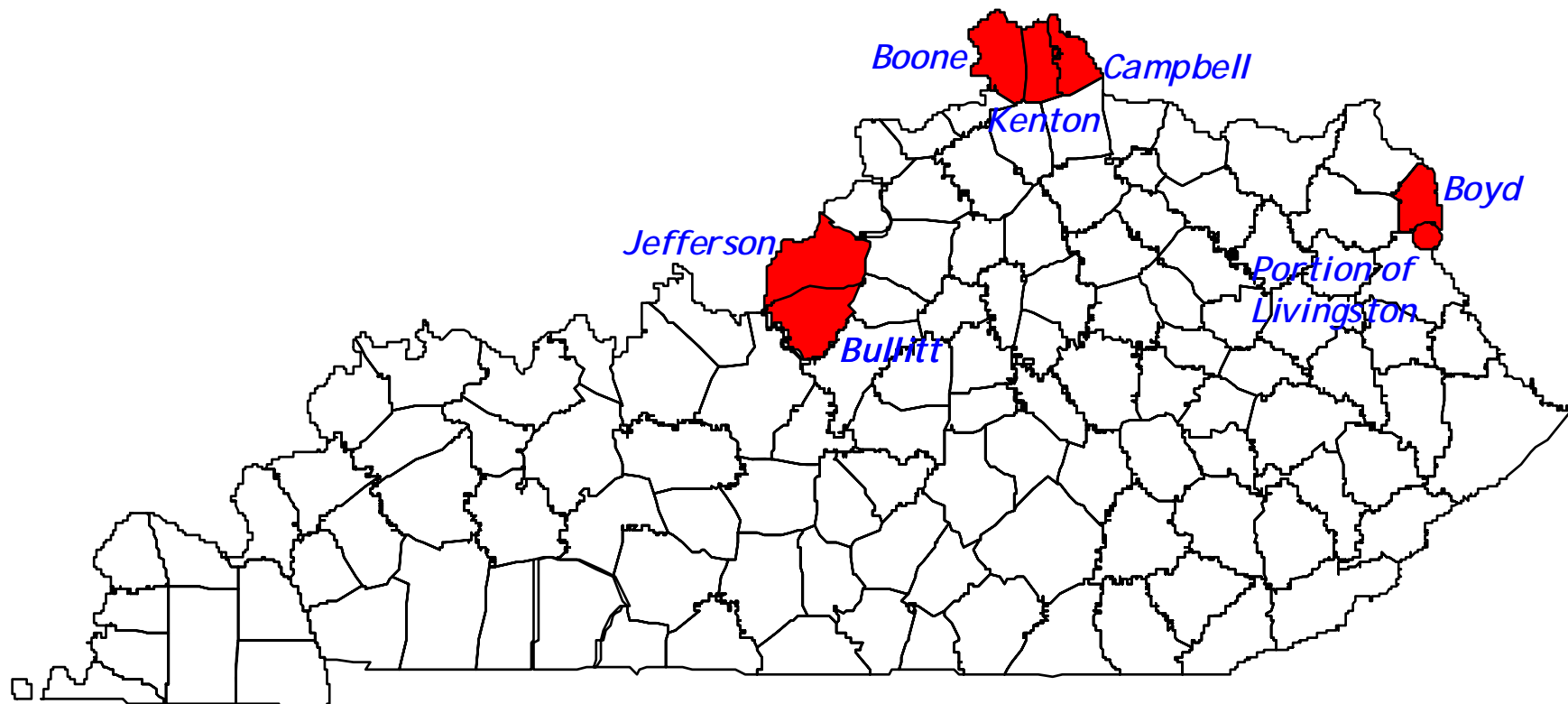


Potential Areas Impacted March 2008 Changes to the 8-Hour Ozone Standard

Based on monitoring data for 2005-2007



PM_{2.5} Annual Standard Nonattainment Areas



Revised 24-Hour PM_{2.5} Standard

- Effective date of revised 24-hour PM_{2.5} Standard is December 18, 2006.
- Changed from 65 $\mu\text{g}/\text{m}^3$ to 35 $\mu\text{g}/\text{m}^3$
- Recommendations were due December 18, 2007.
- EPA notifies states of concerns no later than August 20, 2008.
- Final designations December 18, 2008



PM_{2.5} 24-Hour Standard

- KYDAQ submitted recommendations to EPA December 2007 with no areas recommended for nonattainment;
- New monitoring data indicates that there are areas both in Kentucky and in adjacent states that **may** violate the standard;
- These areas include Christian, Trigg, Henderson, Webster, Daviess, Hancock, and McLean;
- Two data-exclusion requests have been submitted to EPA regarding exceptional events (fire impacts);
- KYDAQ must respond to EPA regarding these areas by May 30, 2008.



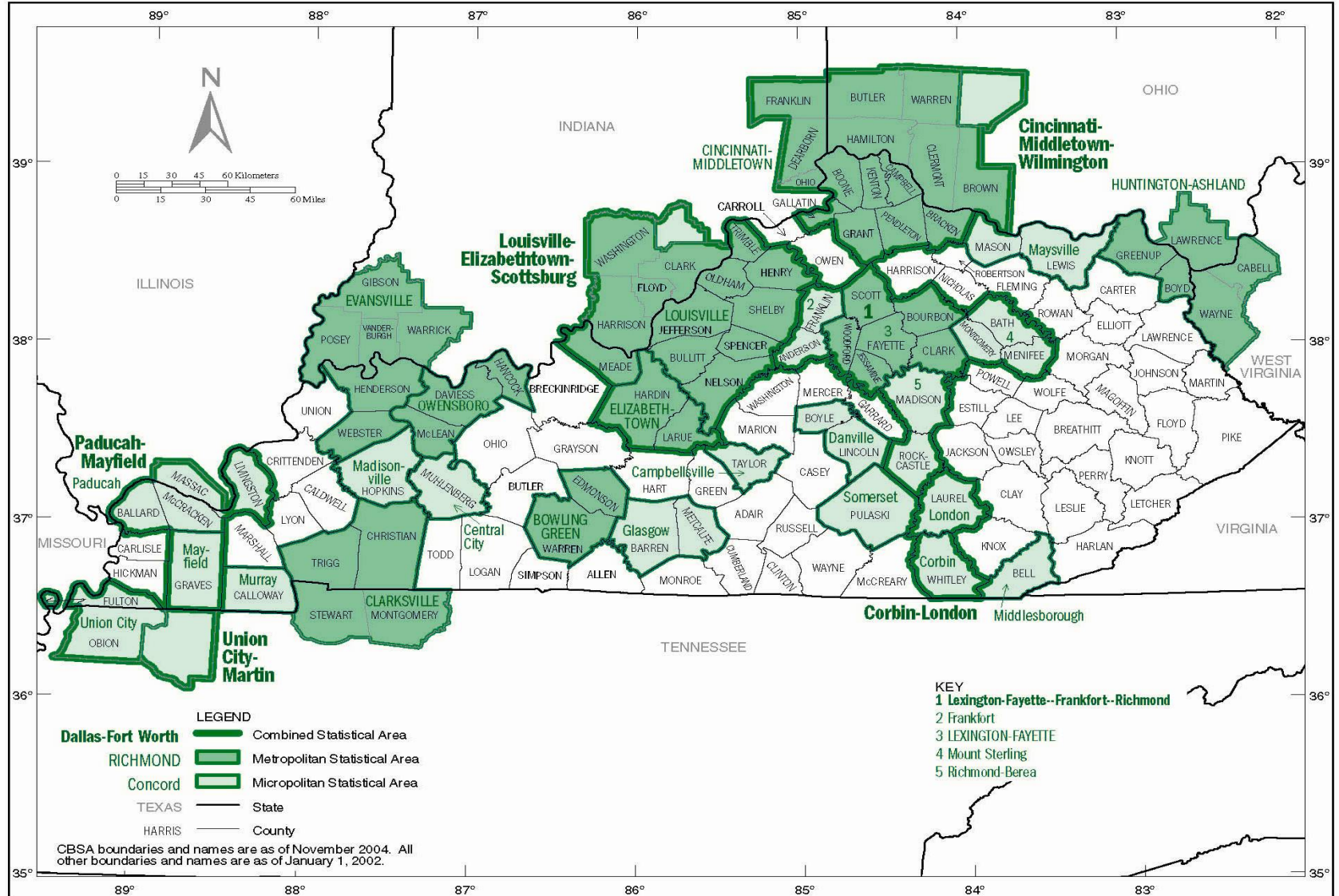
Approach for Identifying Contributing Areas for 24-hr PM_{2.5} Designations

- Calculate the contributing emissions score (CES) for each county.
- Evaluate the nine factors to identify nearby contributing counties.
 - Emission score is one way to assess air quality data, and meteorological data collectively.
 - The nine factors should also be considered separately.
 - Data for most factors are included in the spreadsheet and/or maps.
 - States/Regions can supplement these data with more refined data, where available, and with additional analysis.
 - Consider natural break points for relevant factors.
 - Case-by-case assessment – consider weight of evidence for all factors.
 - For existing NA areas, focus on existing boundaries; for new areas, focus assessment on counties in the CSA/CBSA plus 1 ring outside.



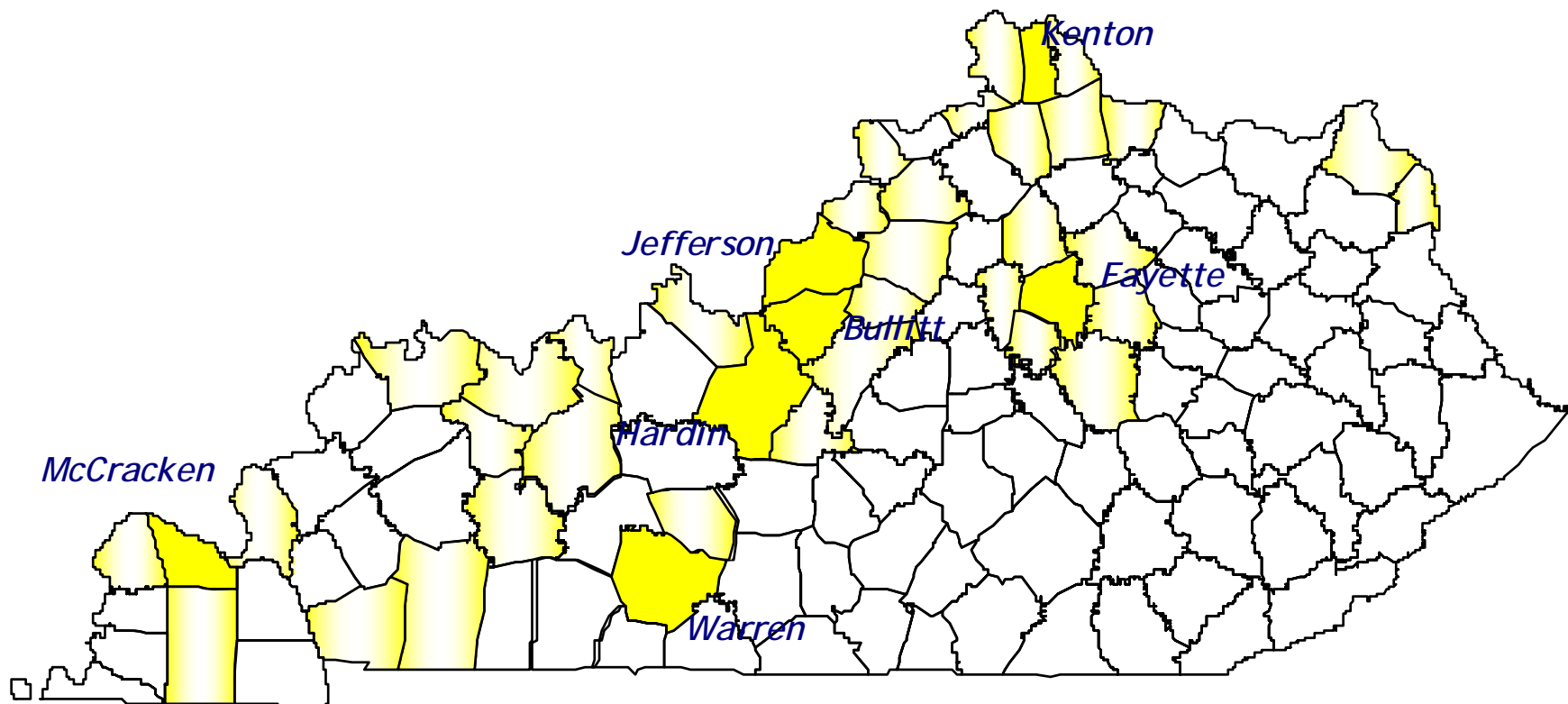
CMSA's

U.S. DEPARTMENT OF COMMERCE Economics and Statistics Administration U.S. Census Bureau



KENTUCKY - Core Based Statistical Areas and Counties

Potential Areas Impacted by Changes to the PM_{2.5} 24-Hour Standard Based on monitoring data for 2005-2007



- Questions?

