

Oregon DEQ AQ-Technical Services

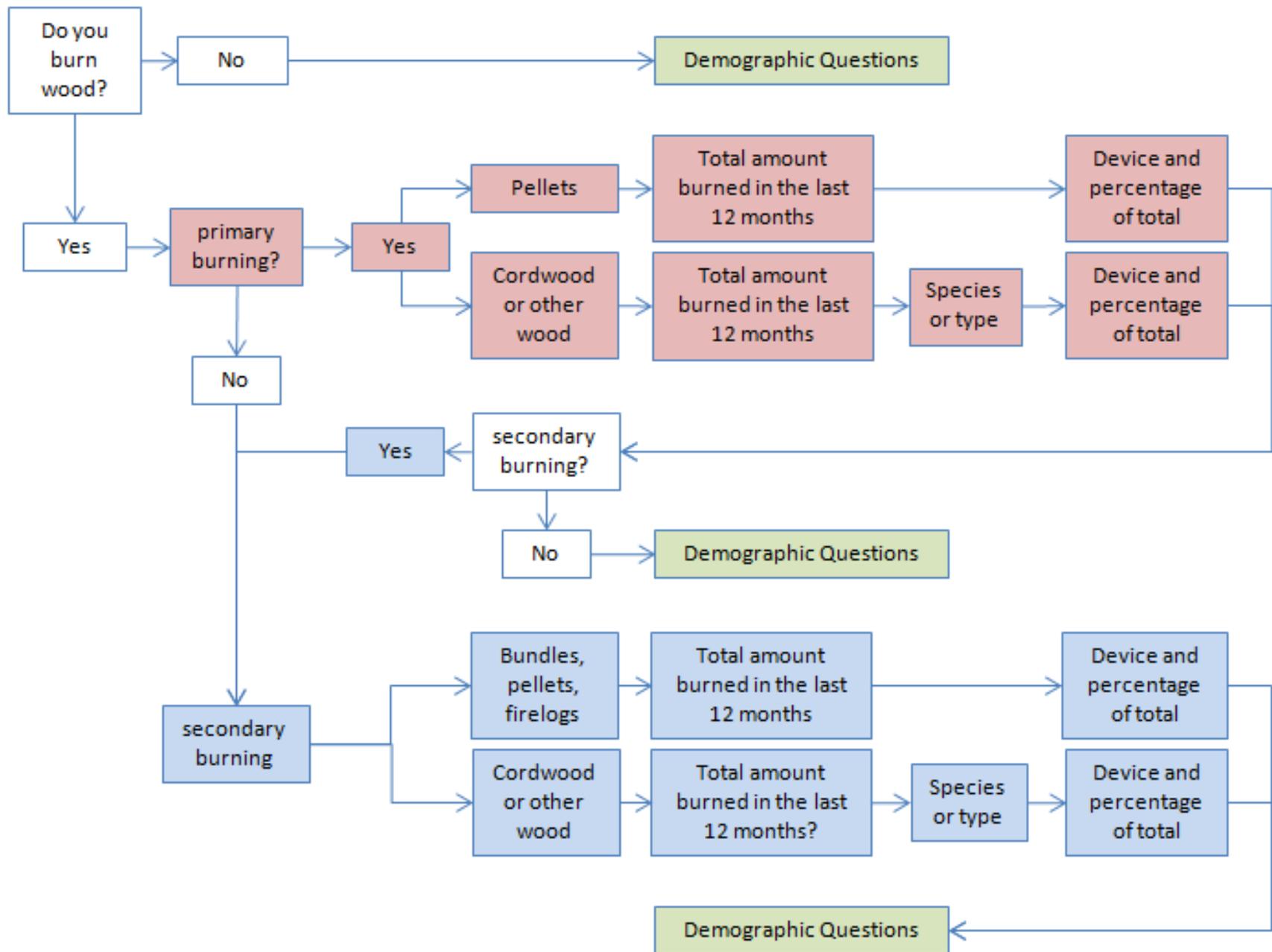
2014 Portland Oregon Residential Wood Combustion Survey: Statewide Emissions Spatial Allocation

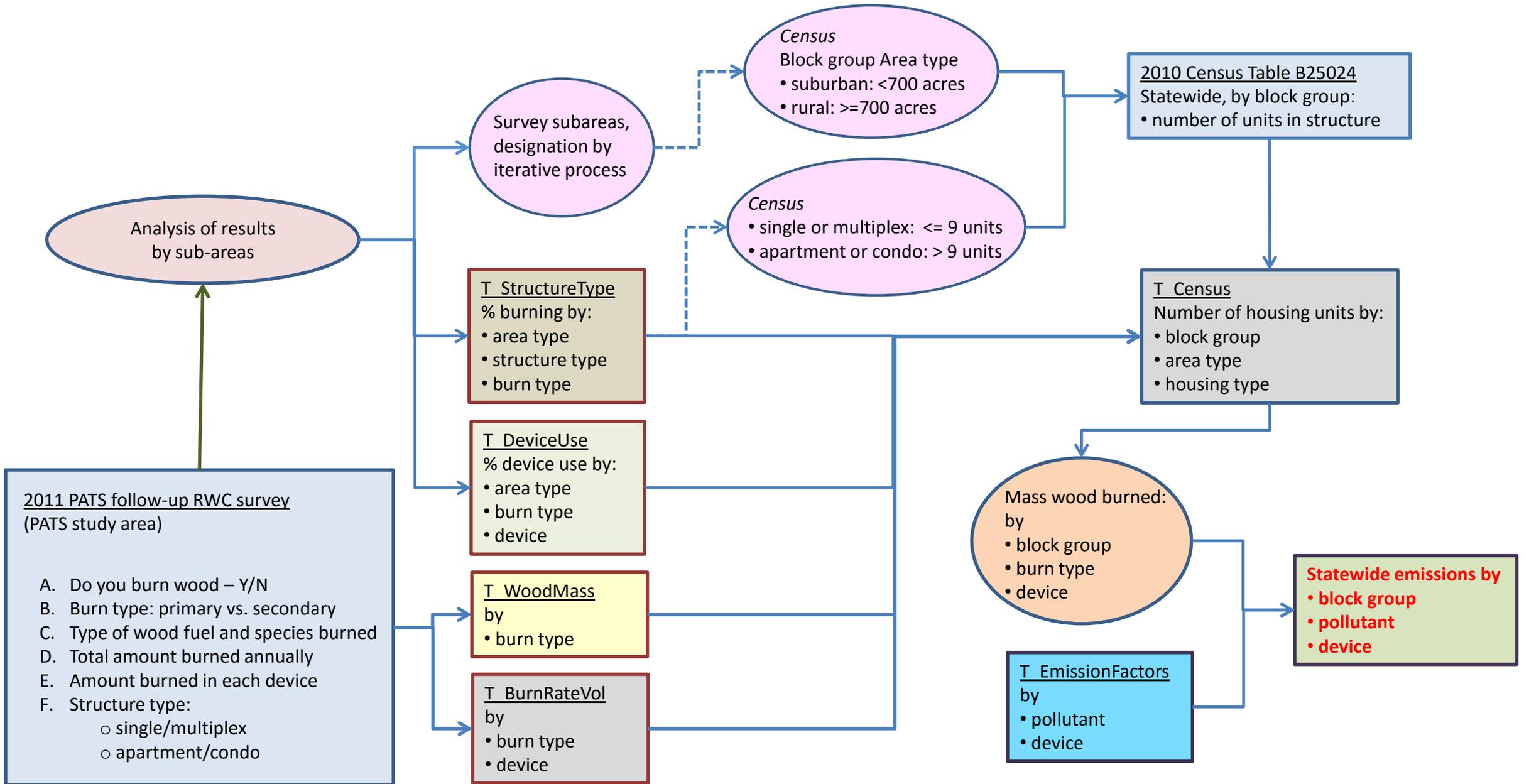
June 16, 2013
NW-AIRQUEST 2016 Annual Meeting
Washington State University
Pullman, WA

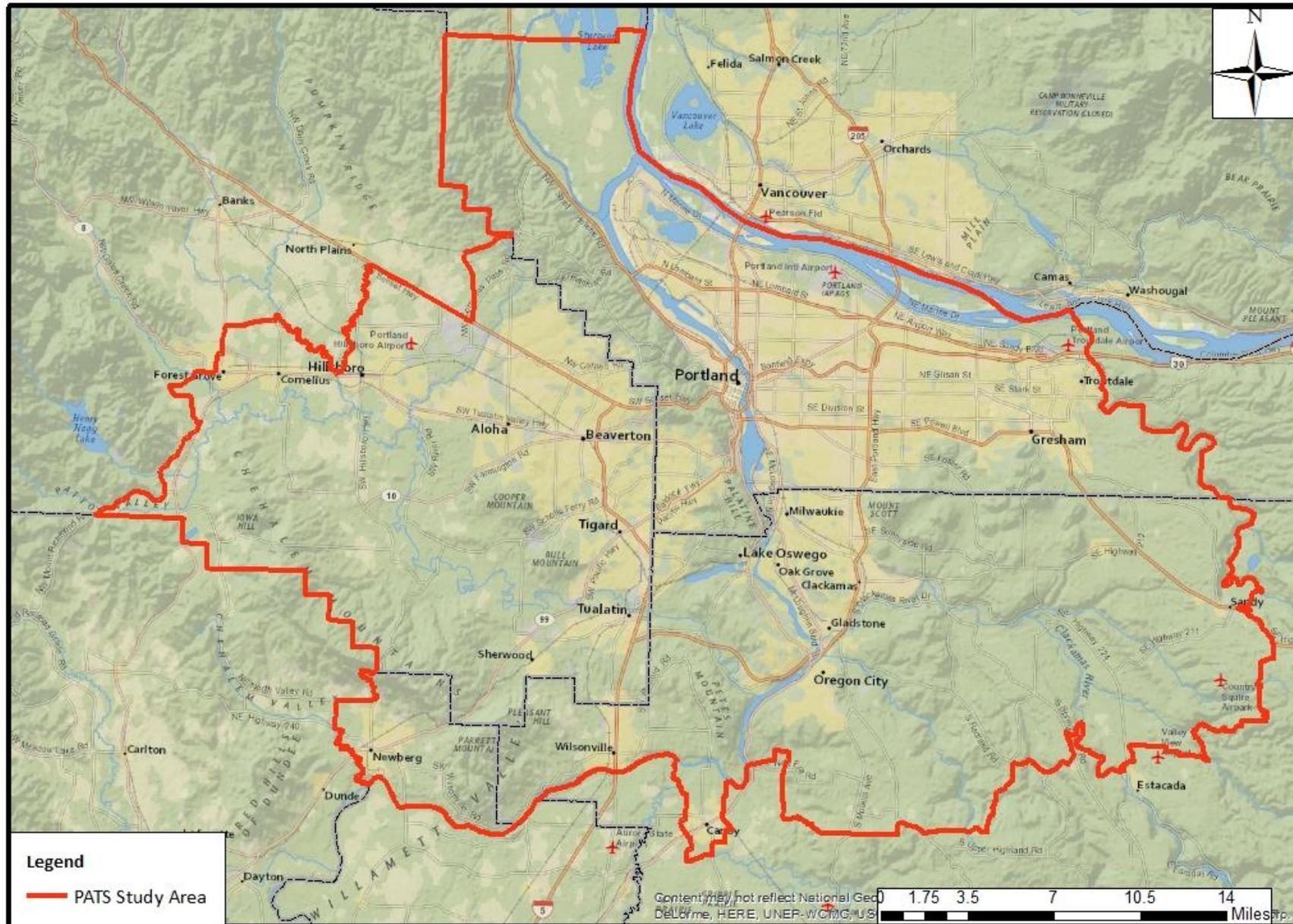
Presentation Road Map

- Survey questionnaire flow chart
- Statewide emissions estimation flow chart overview
- Statewide emissions estimation flow chart breakdown
 - Area type
 - Structure type
 - Device use
 - Wood mass and burn rates
- PM_{2.5} estimated emissions results

Survey Instrument Flow-Chart







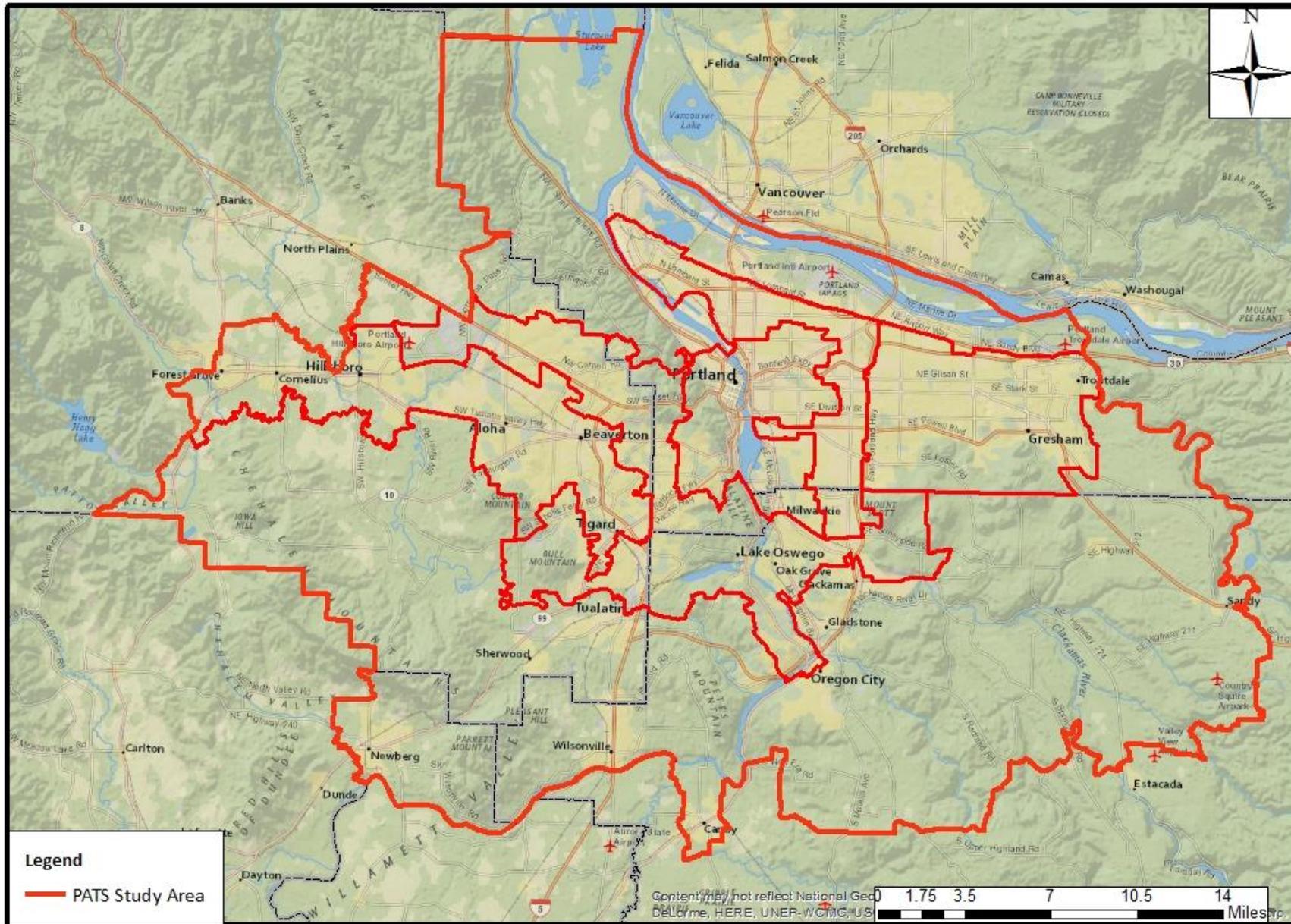
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CLS Date: 6/10/2016

Analysis of results
by sub-areas

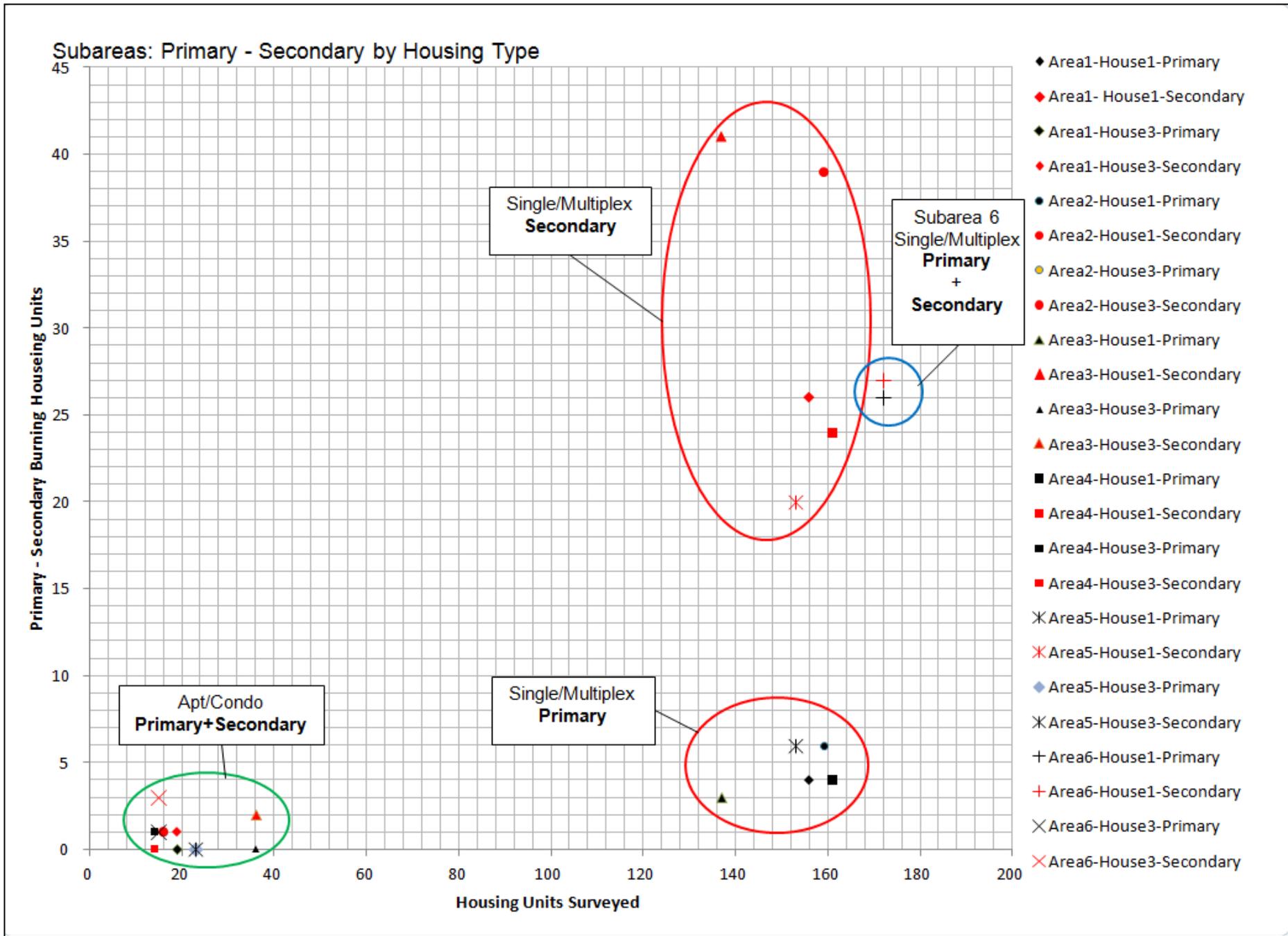


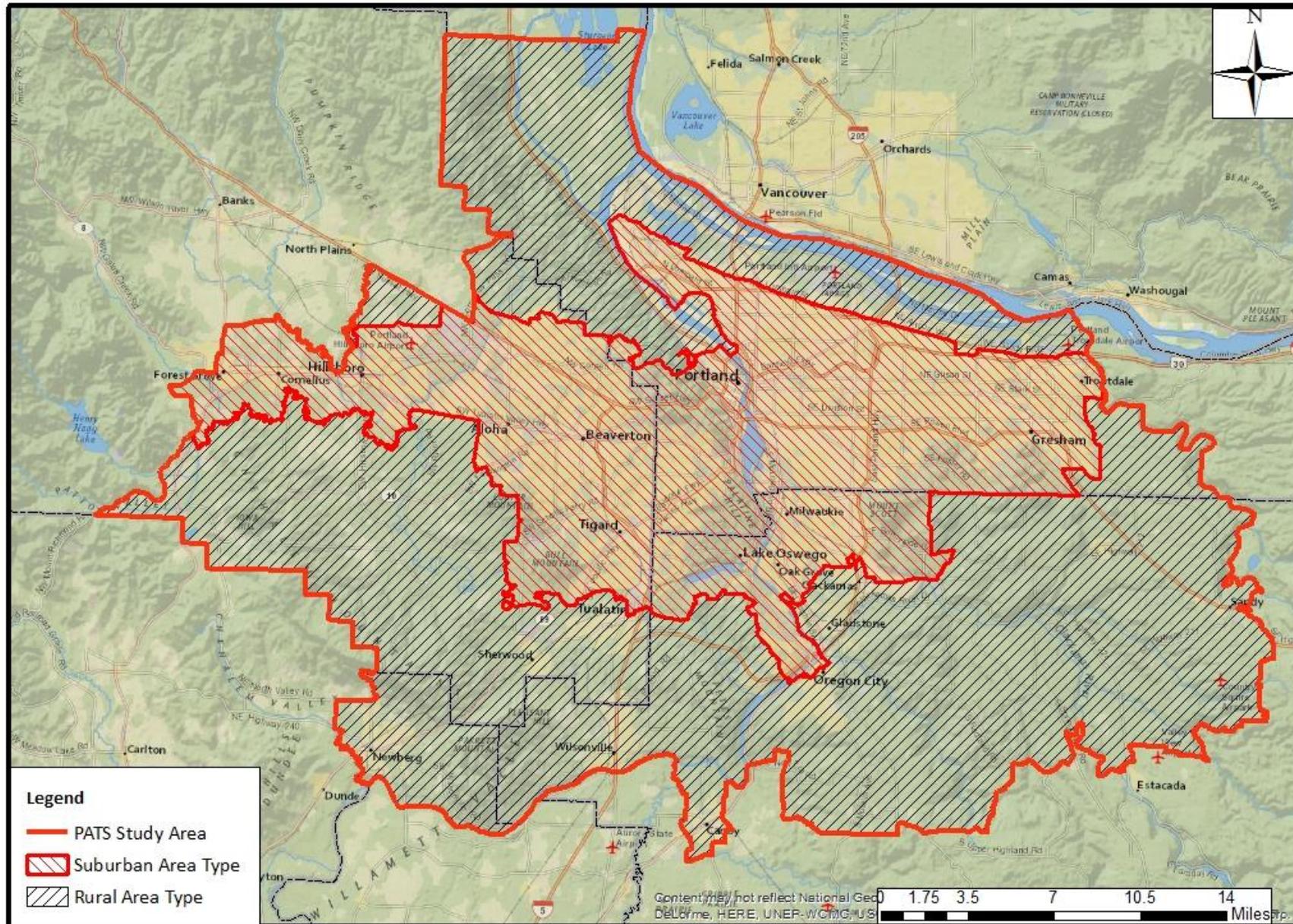
- 2011 PATS follow-up RWC survey
(PATS study area)
- A. Do you burn wood – Y/N
 - B. Burn type: primary vs. secondary
 - C. Type of wood fuel and species burned
 - D. Total amount burned annually
 - E. Amount burned in each device
 - F. Structure type:
 - single/multiplex
 - apartment/condo



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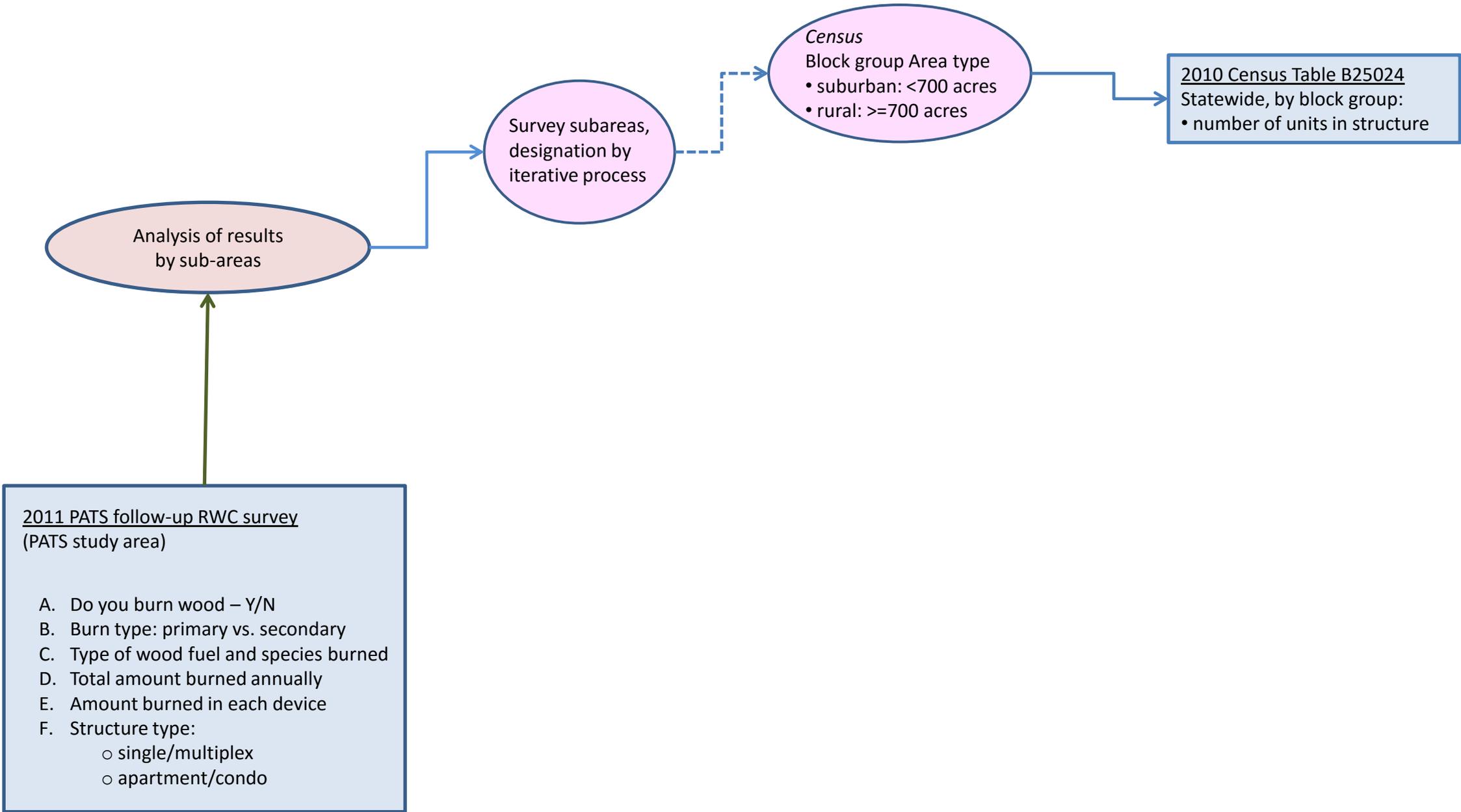
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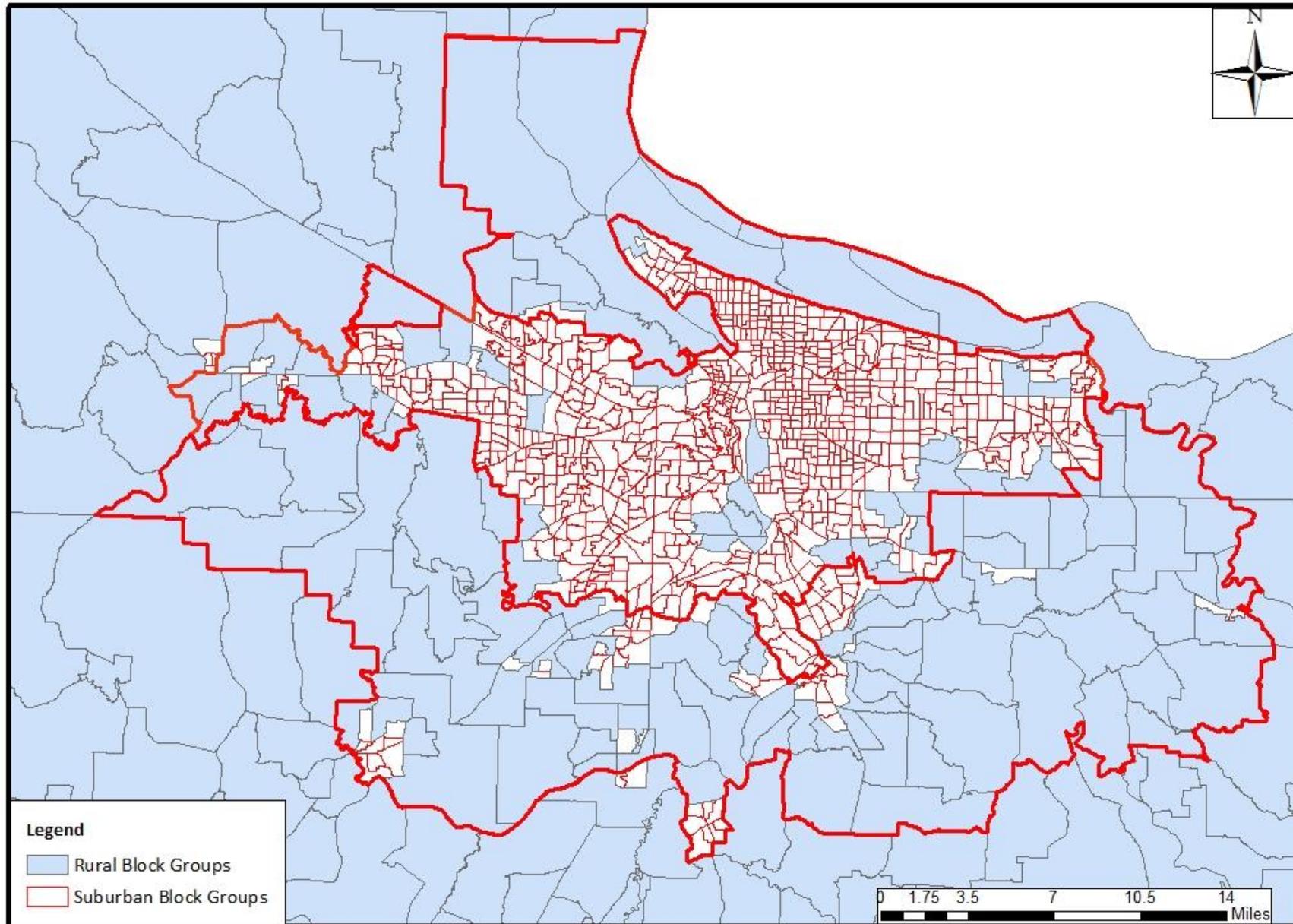




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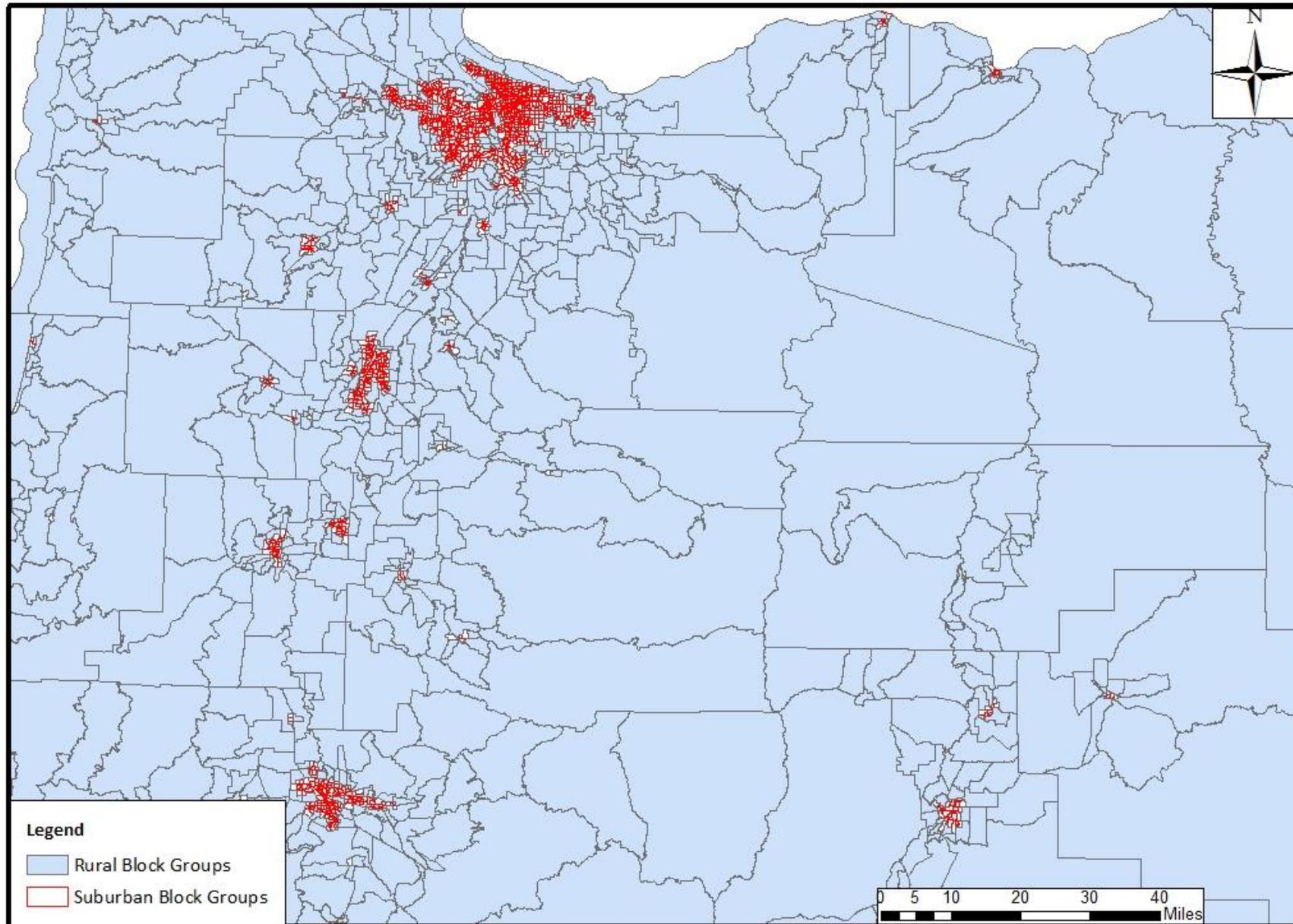
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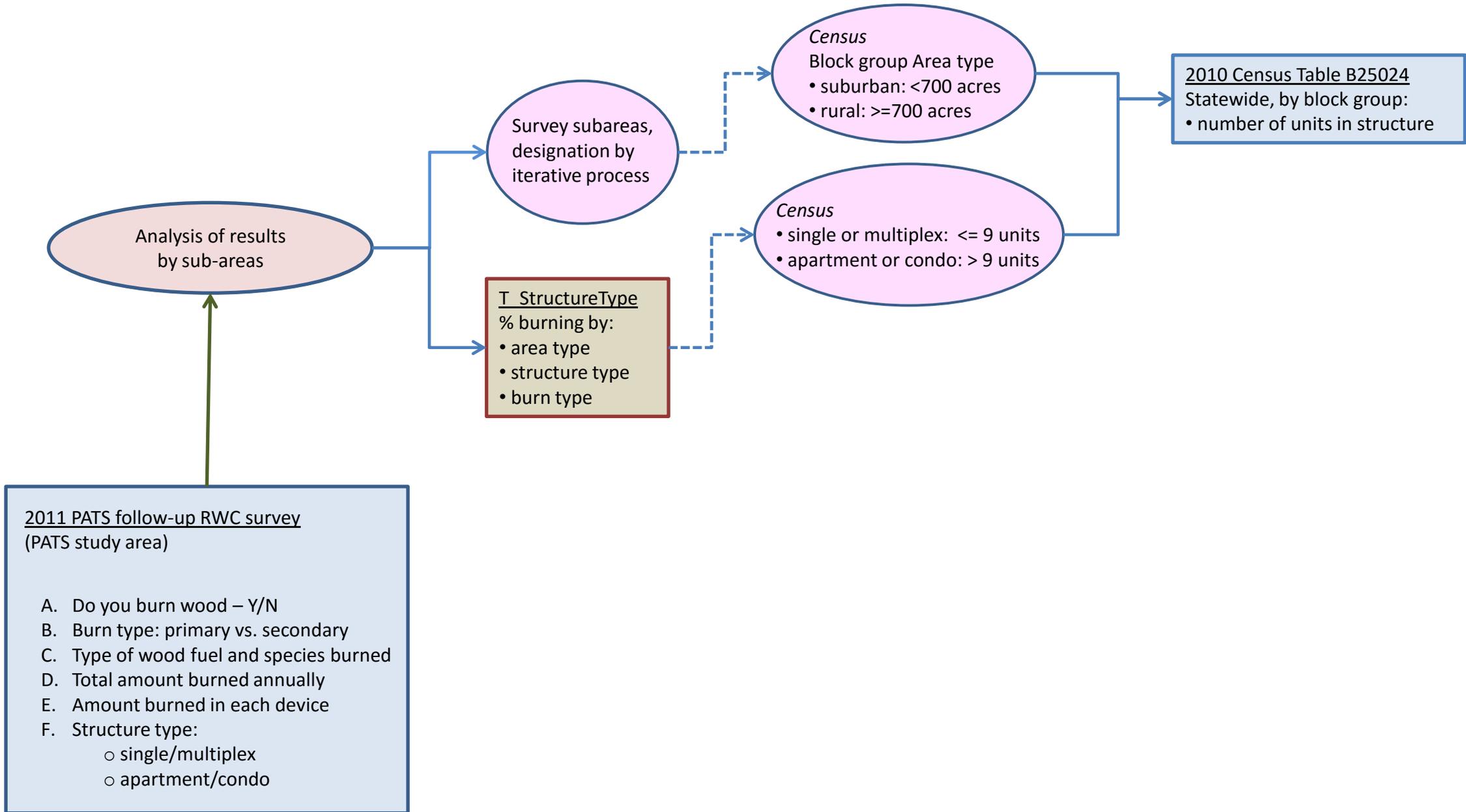
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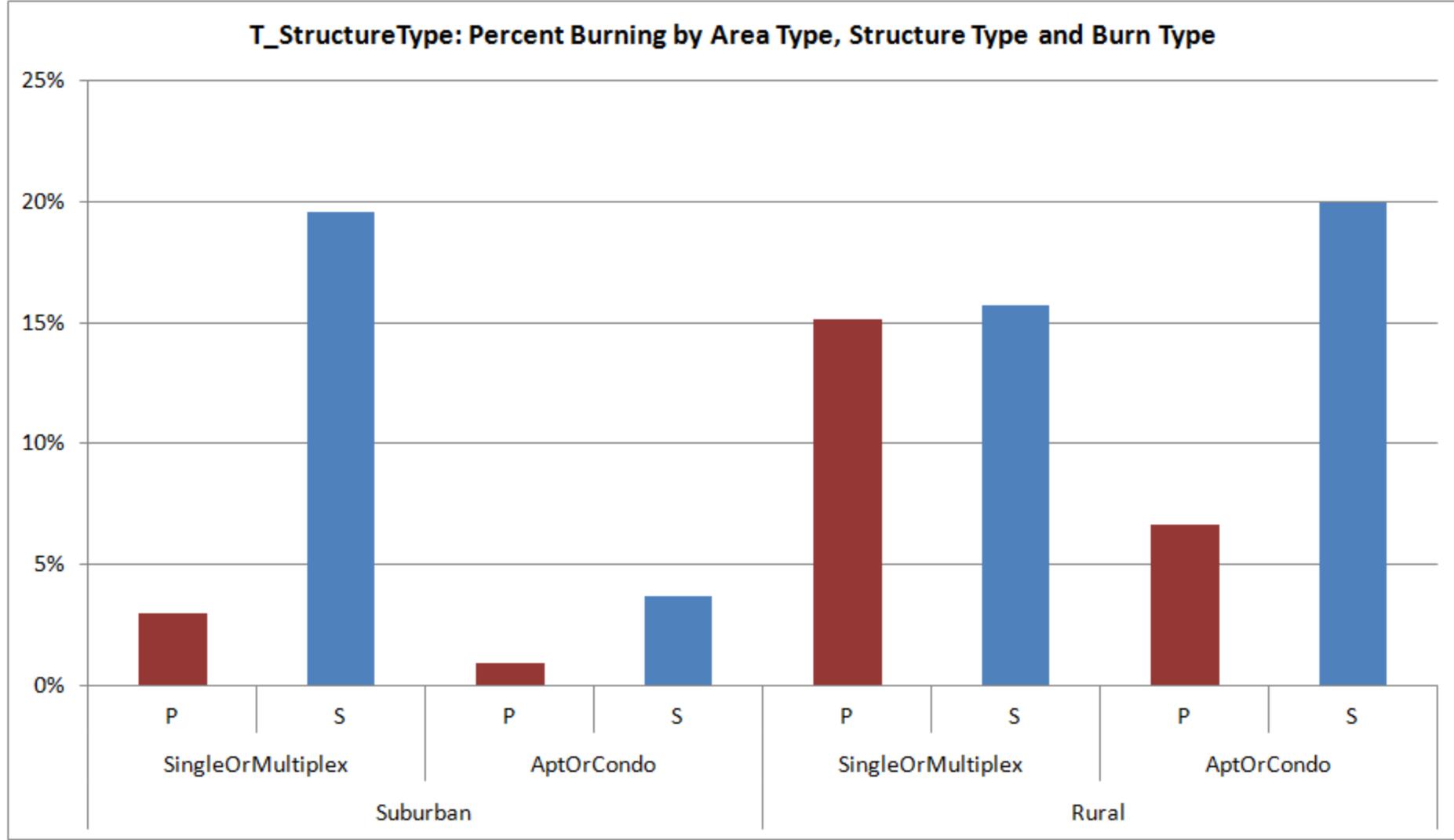
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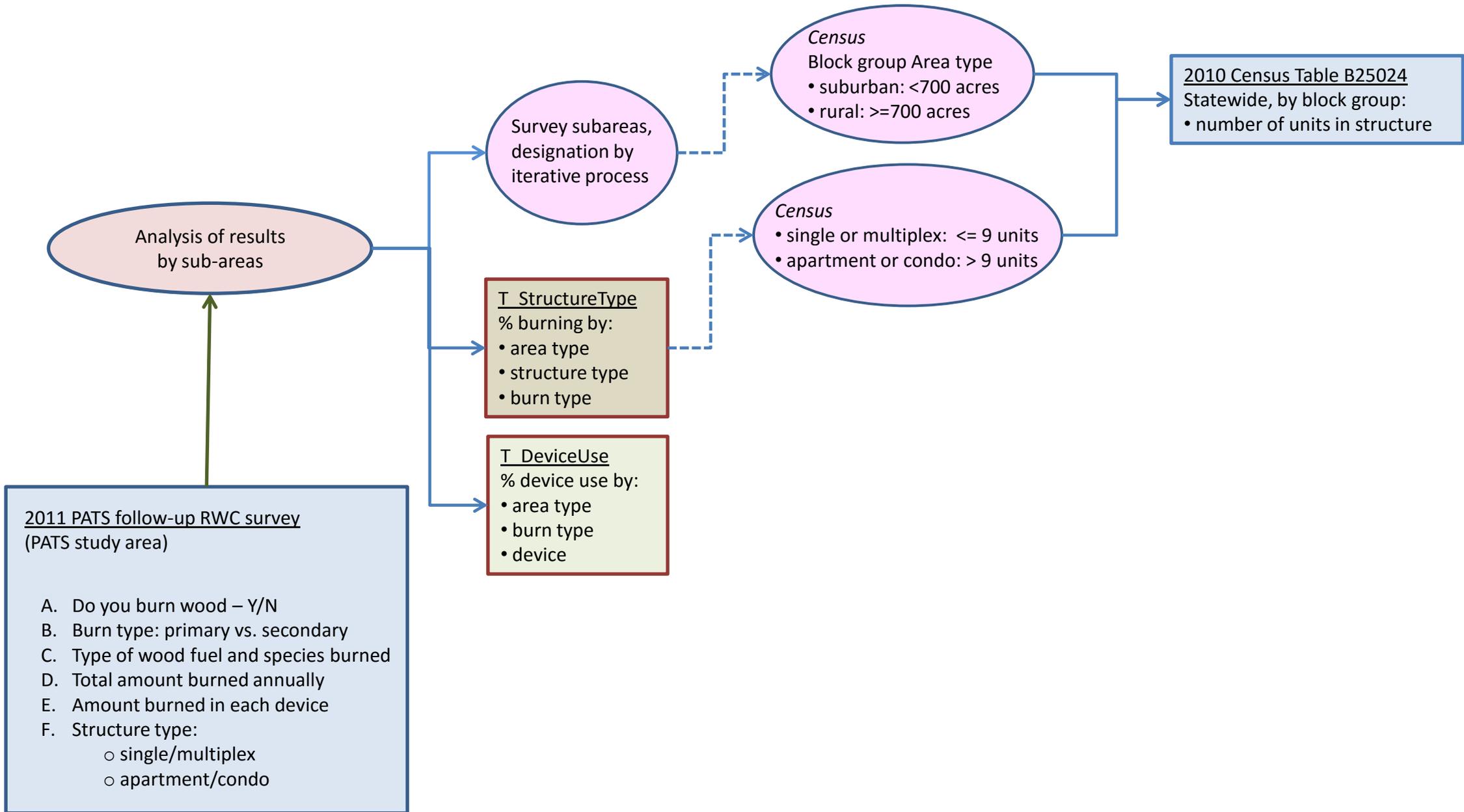


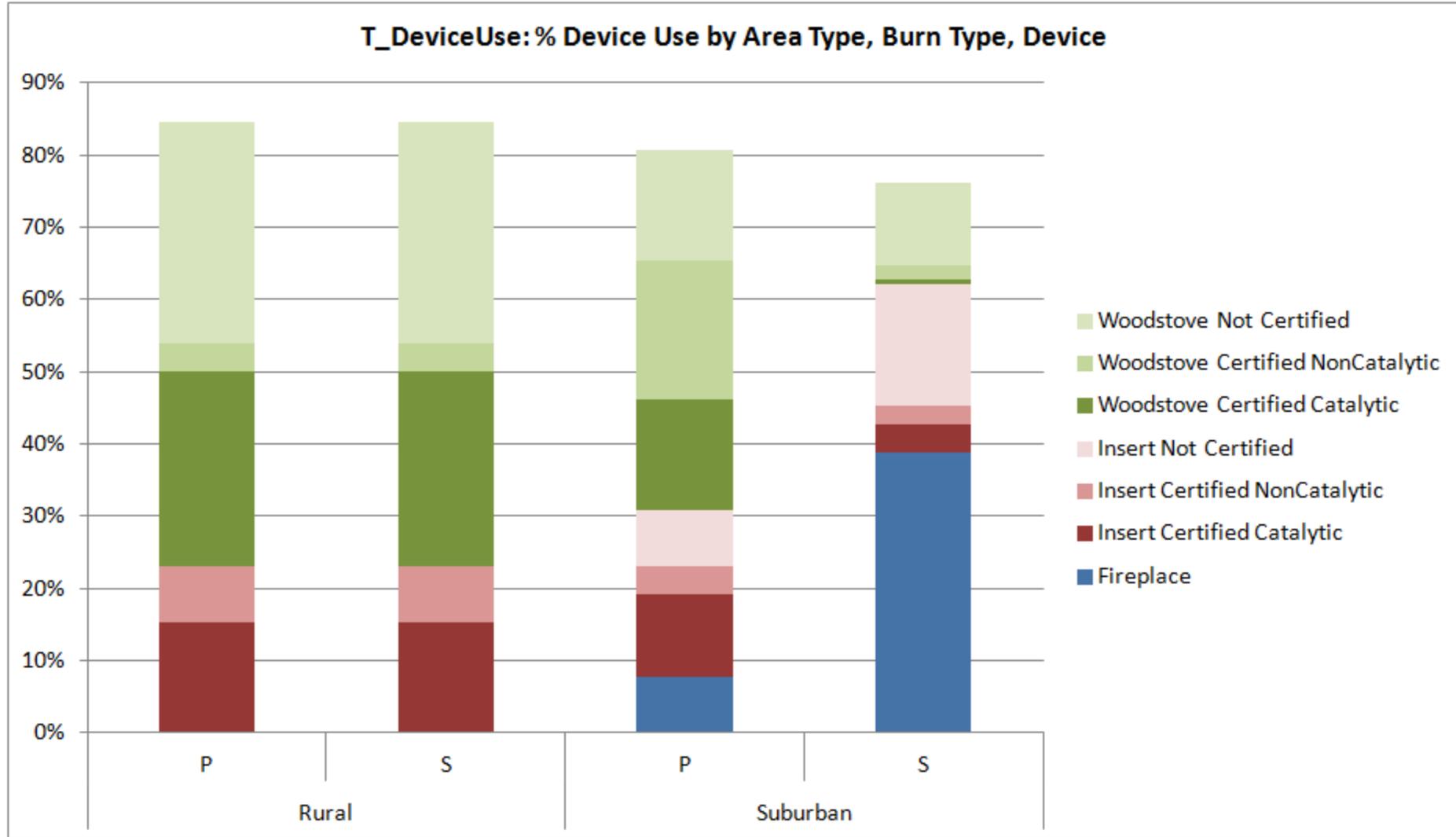
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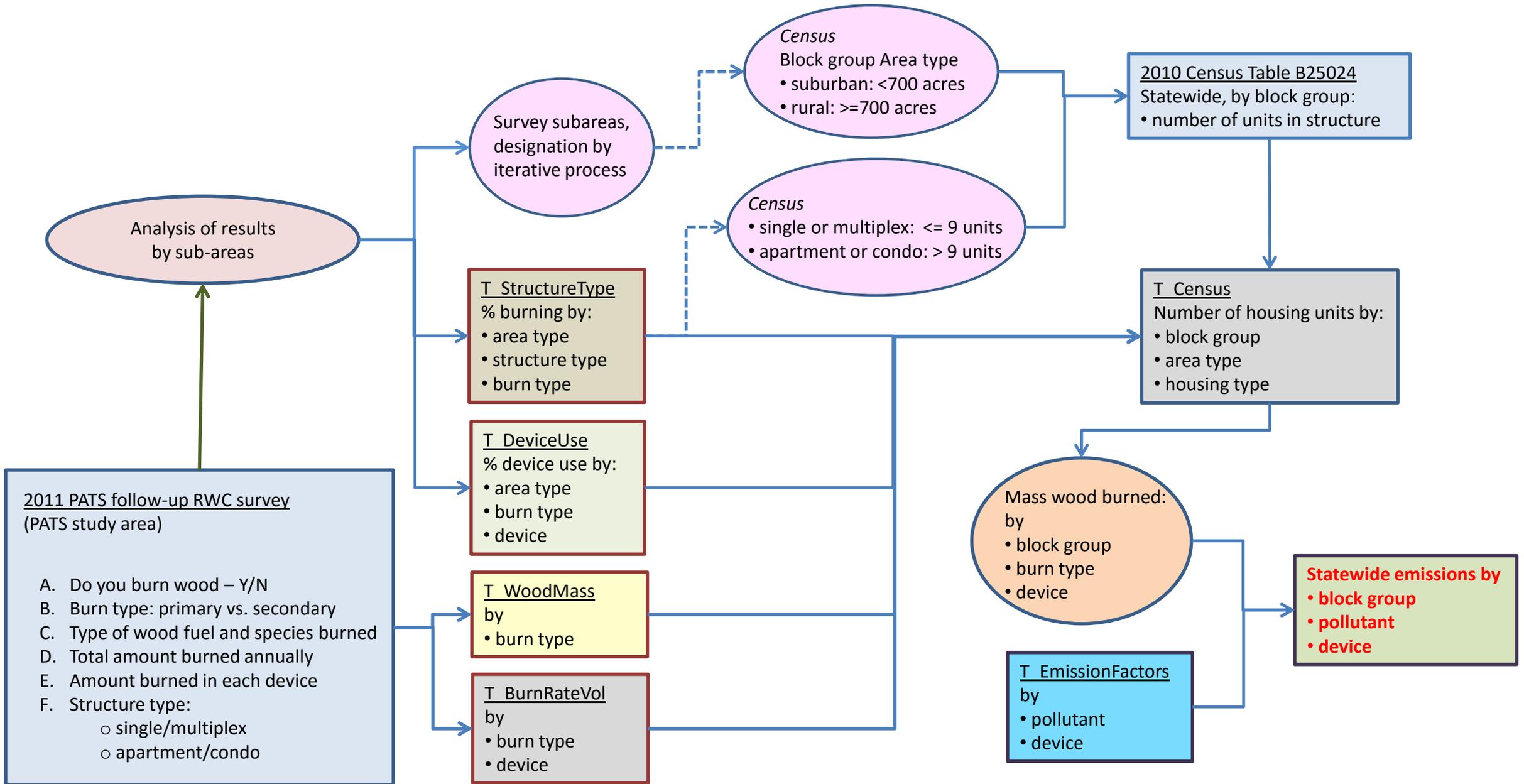
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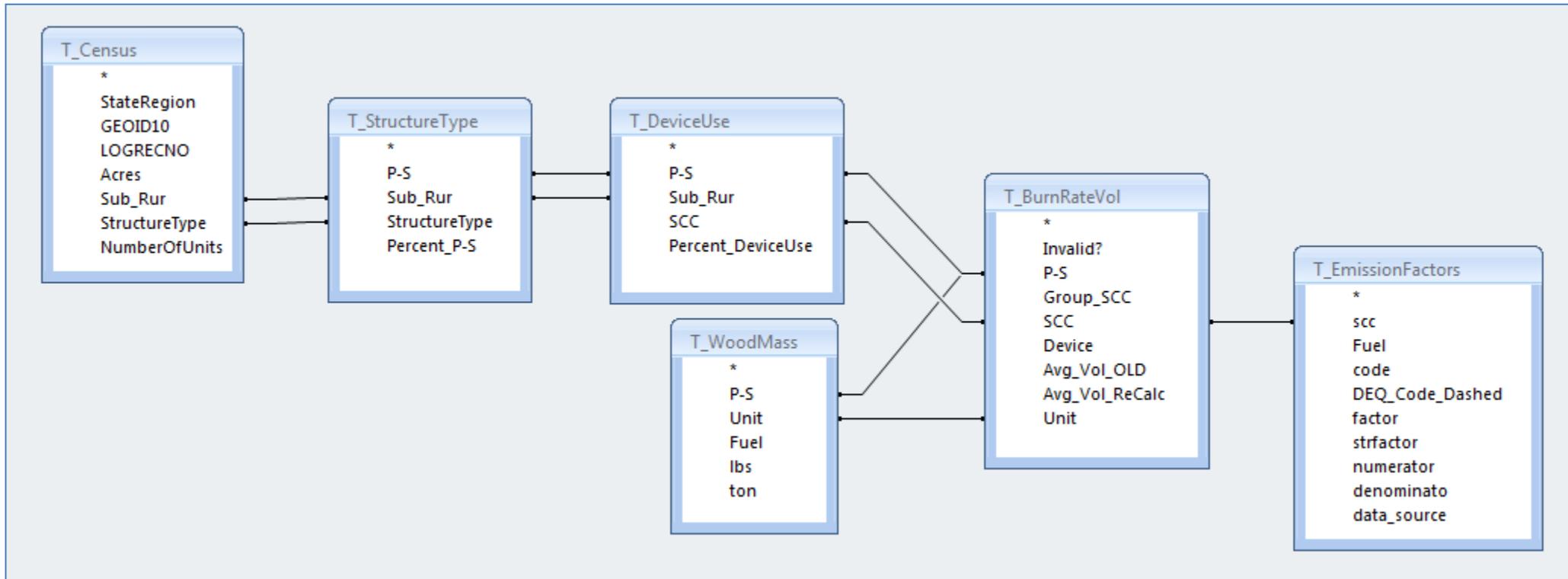


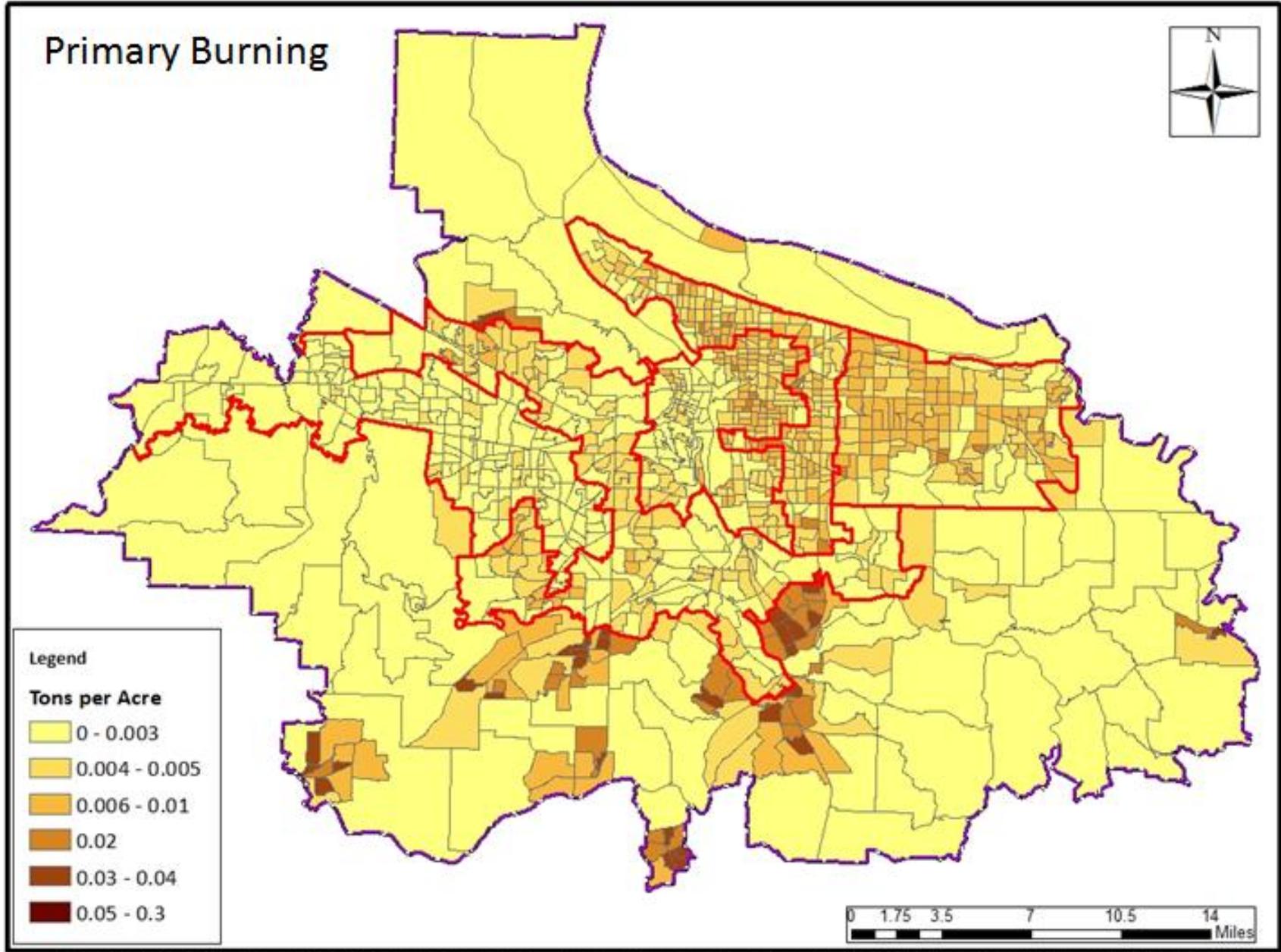


MS Access Database: Statewide

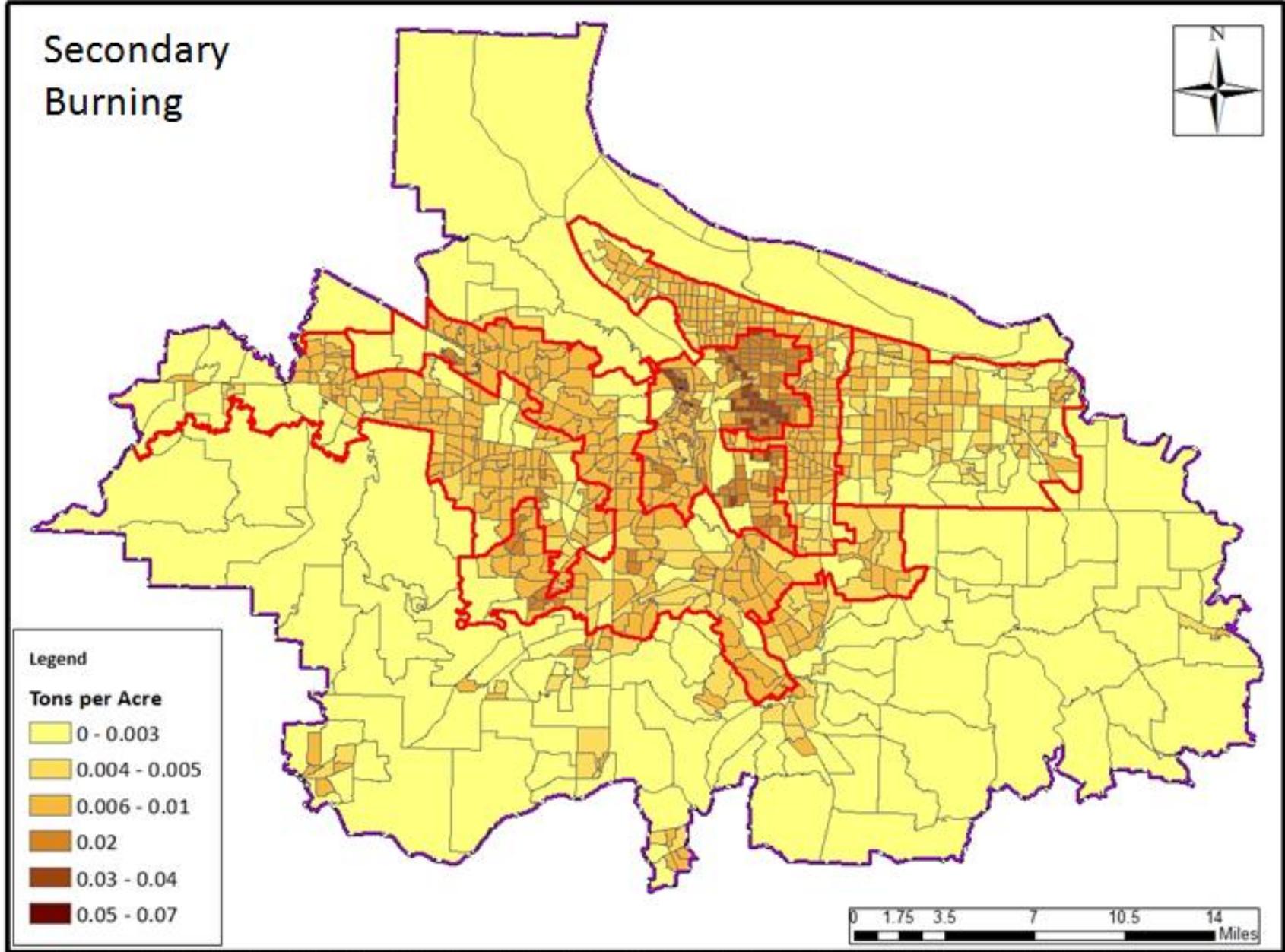
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[T_DeviceUse]![Percent_DeviceUse])*  
([T_BurnRateVol]![Avg_Vol_ReCalc]*  
[T_WoodMass]![ton]))*  
[T_EmissionFactors]![factor])
```

2,156,612 records



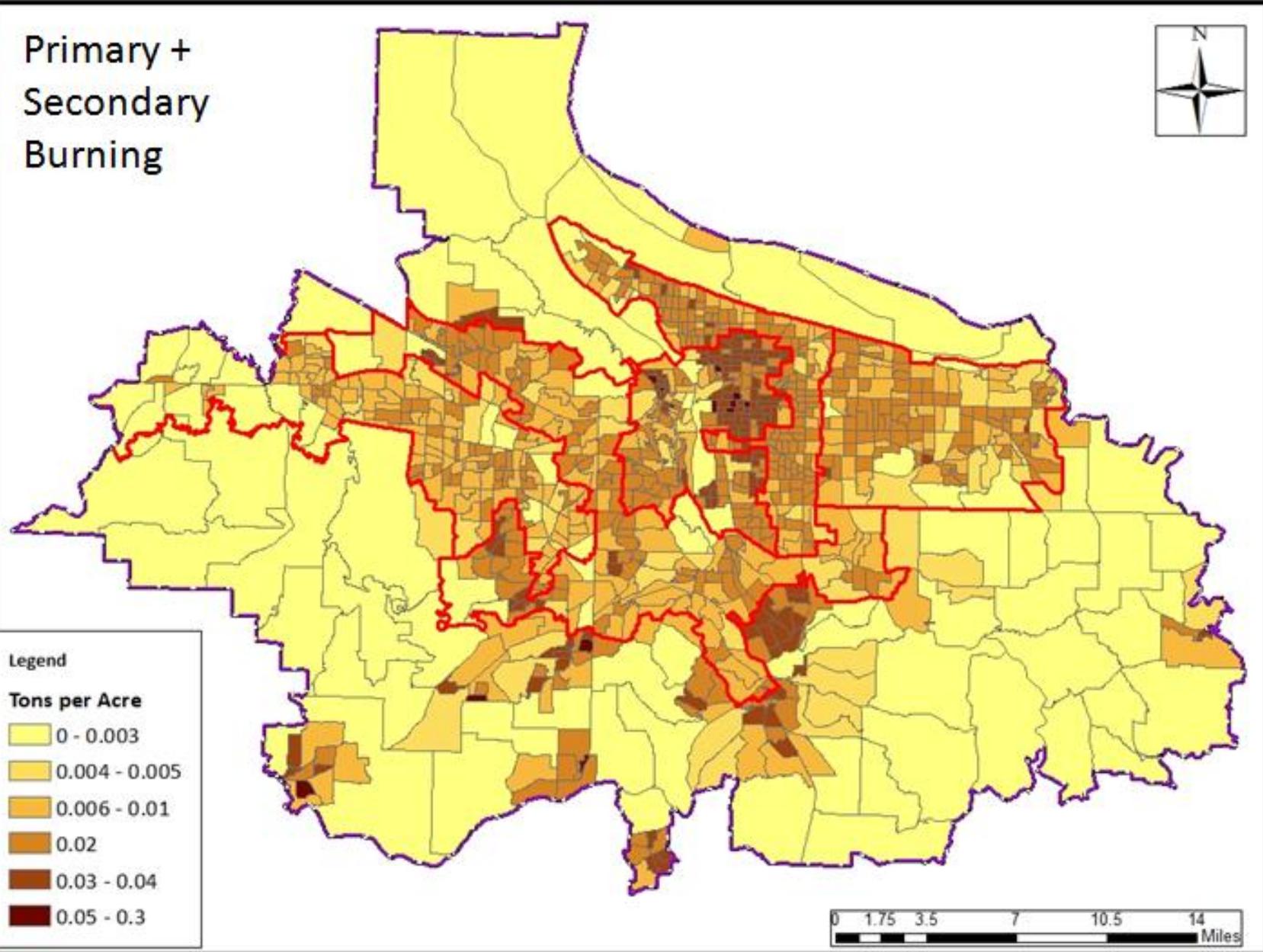
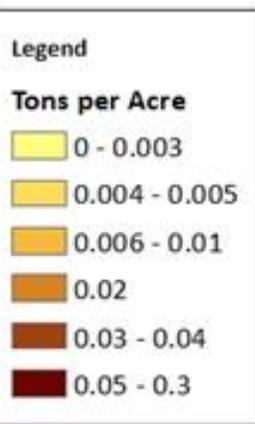


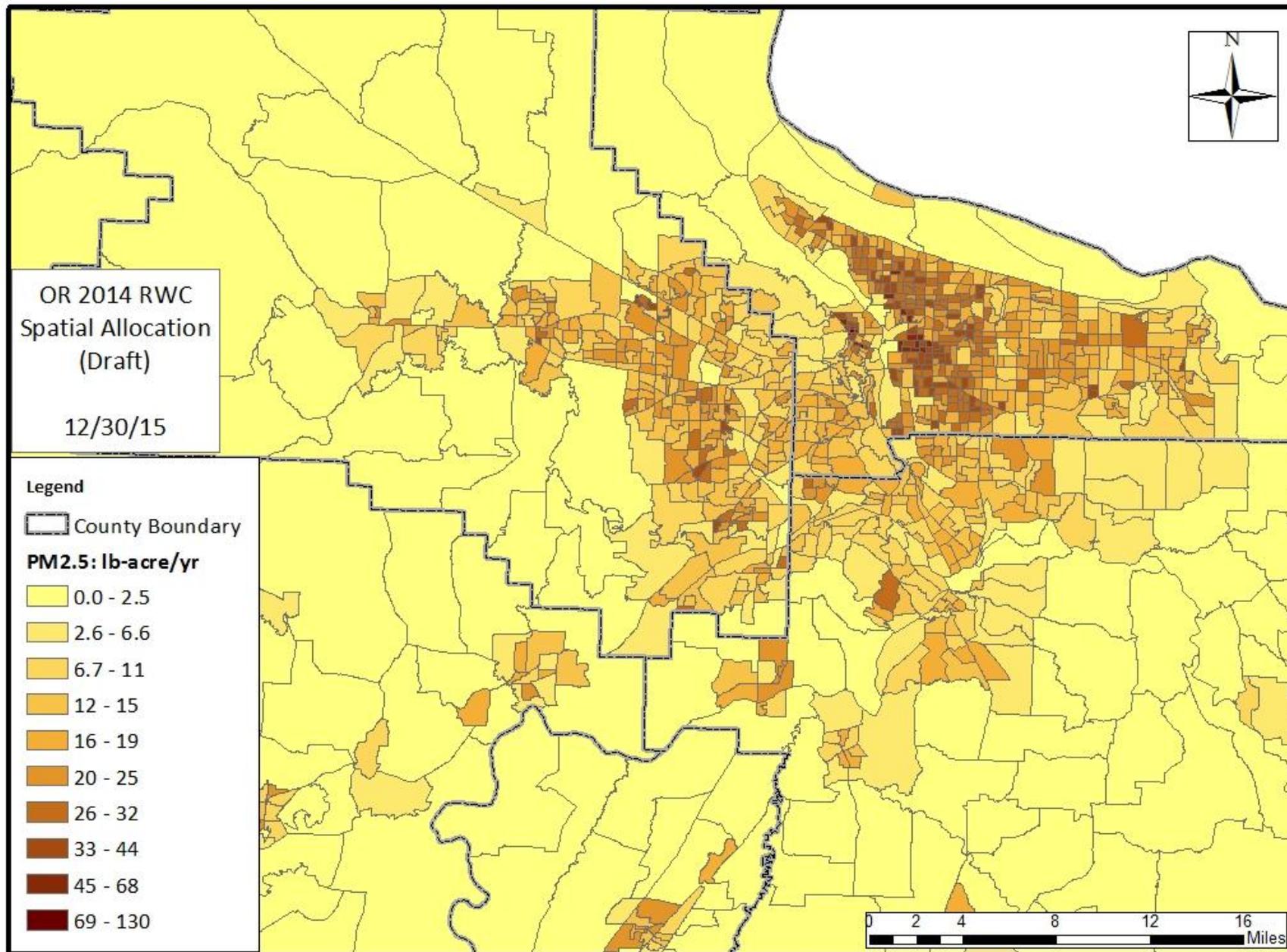
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CLS, 4/1/15



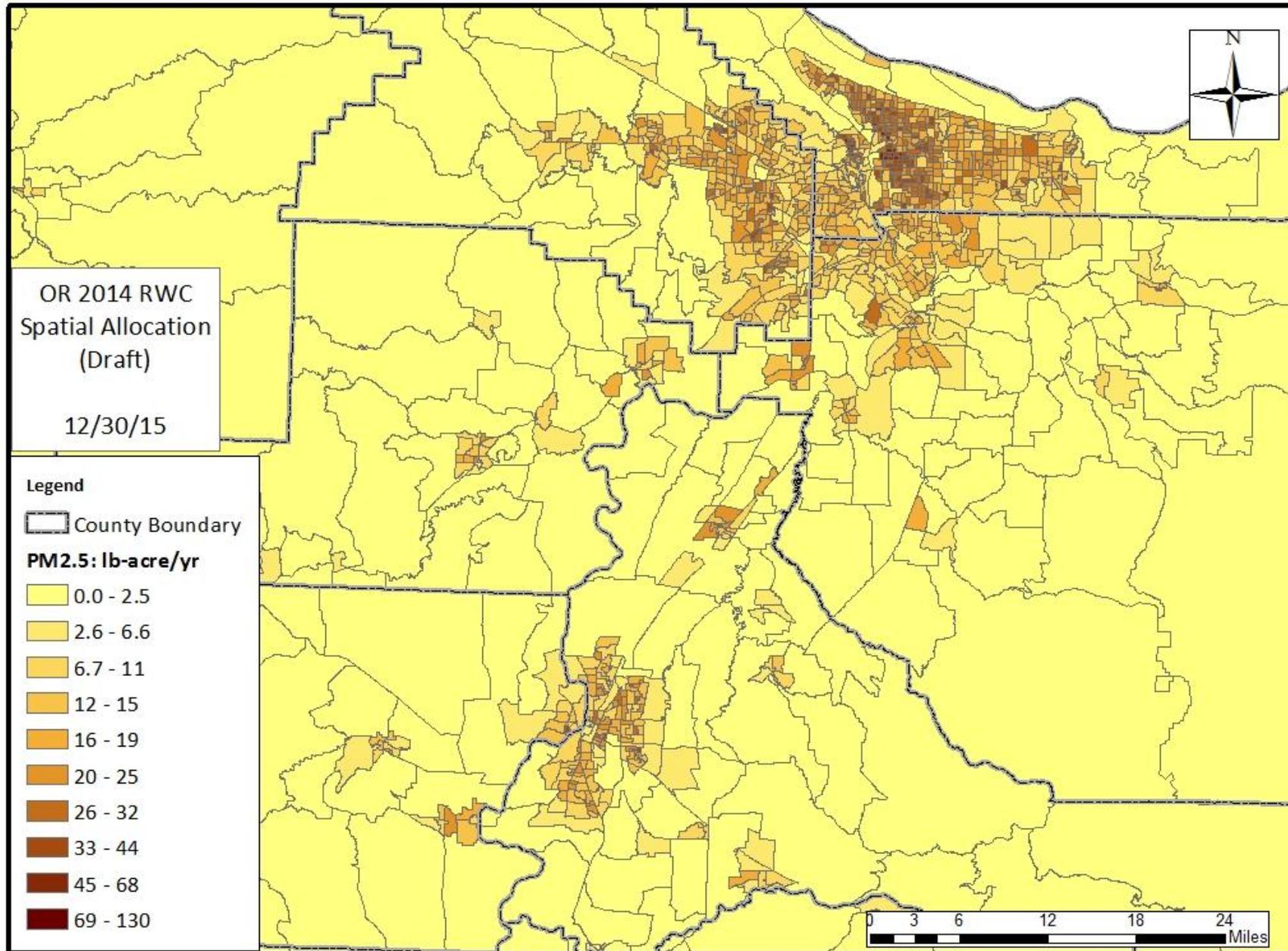
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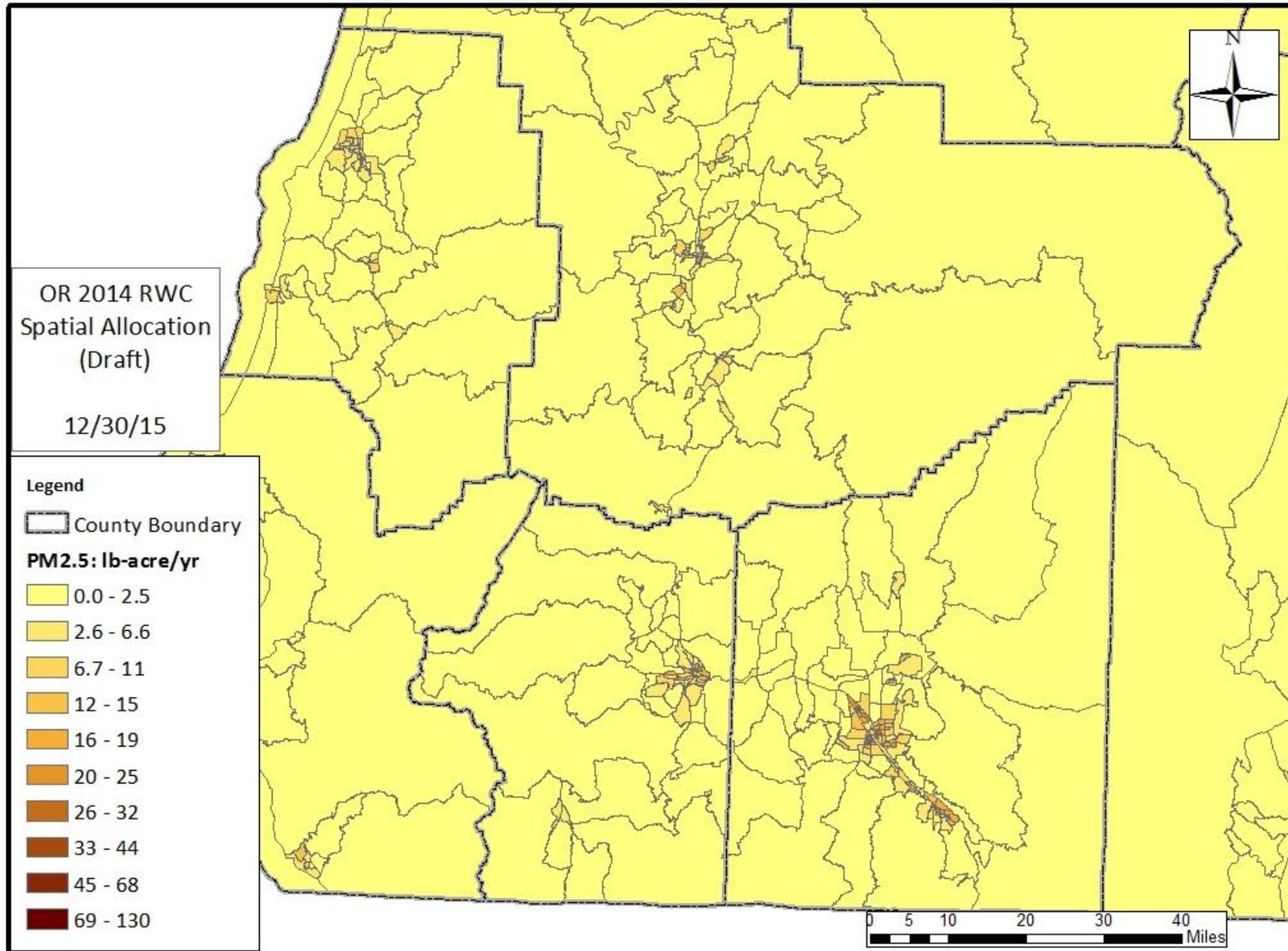
Primary + Secondary Burning

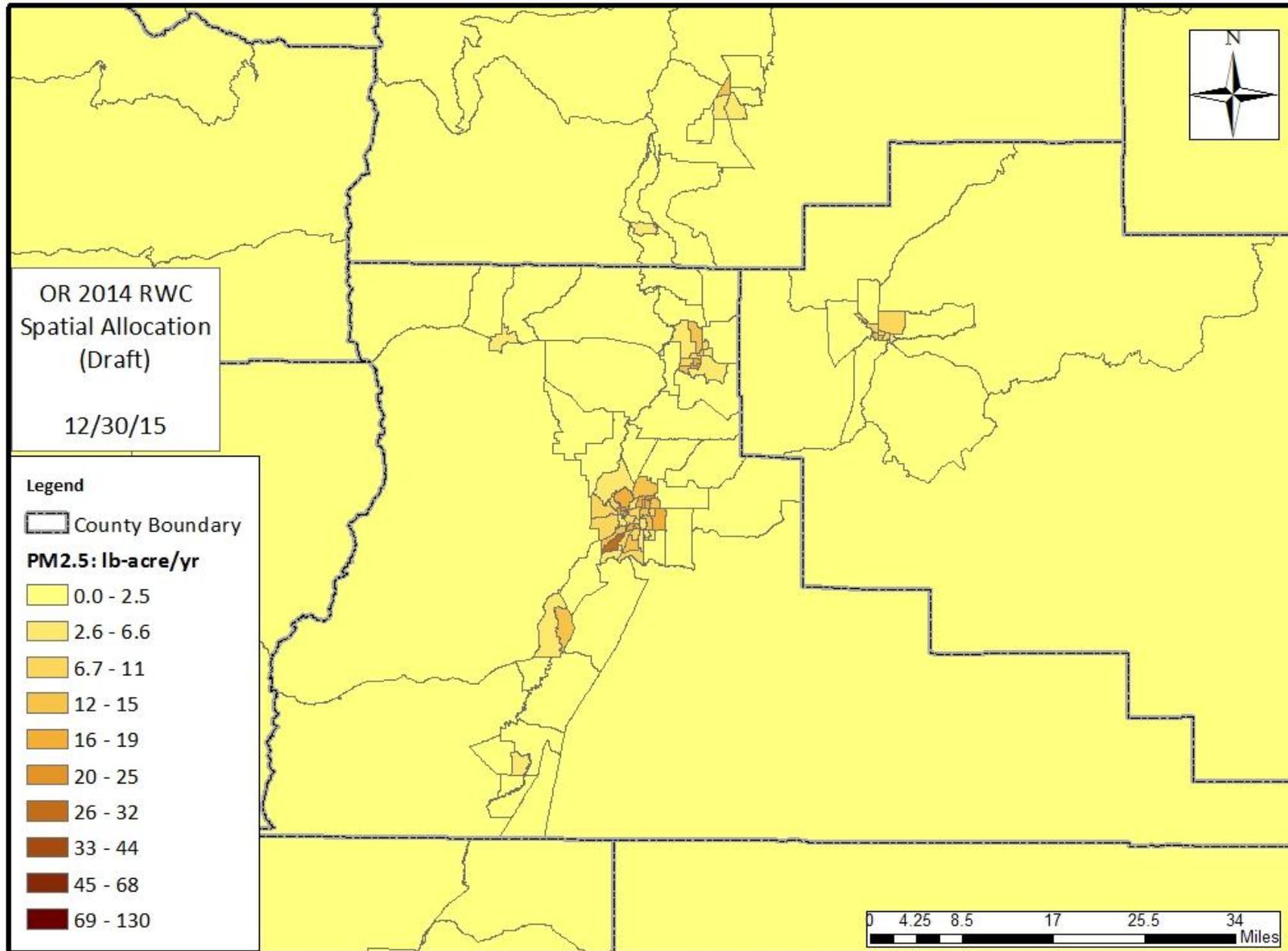




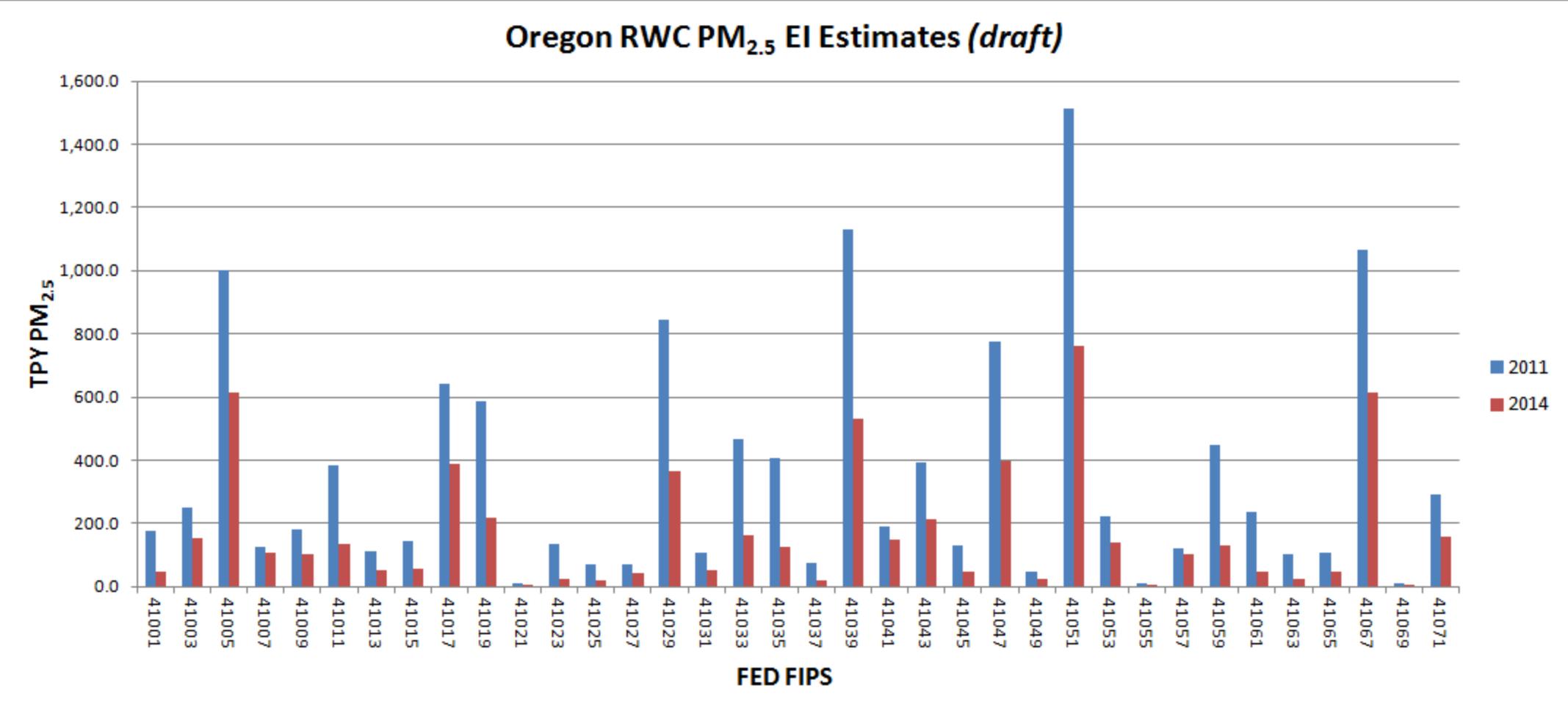
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CLS 12/30/15







2014 estimates are approximately 50% of 2011 estimates



Questions?

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