

# RWC Emissions Spatial Allocation: State Region to Census Block Group

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# Statewide Residential Wood Combustion Surveys: Regional Results to Census Block Group:

## Method A:

*(regional survey results, ton/HU) \* (County HU) \* (WB HU per BG) / (WB HU per county) \* (EF, lb/ton)*

## Method B:

*(regional survey results, ton/HU) \* (Regional HU) \* (WB HU per BG) / (WB HU per region) \* (EF, lb/ton)*

Where

*HU = Housing Units (US Census, 2010)*

*WB HU = HU where wood is the primary heating fuel (US Census, 2010)*

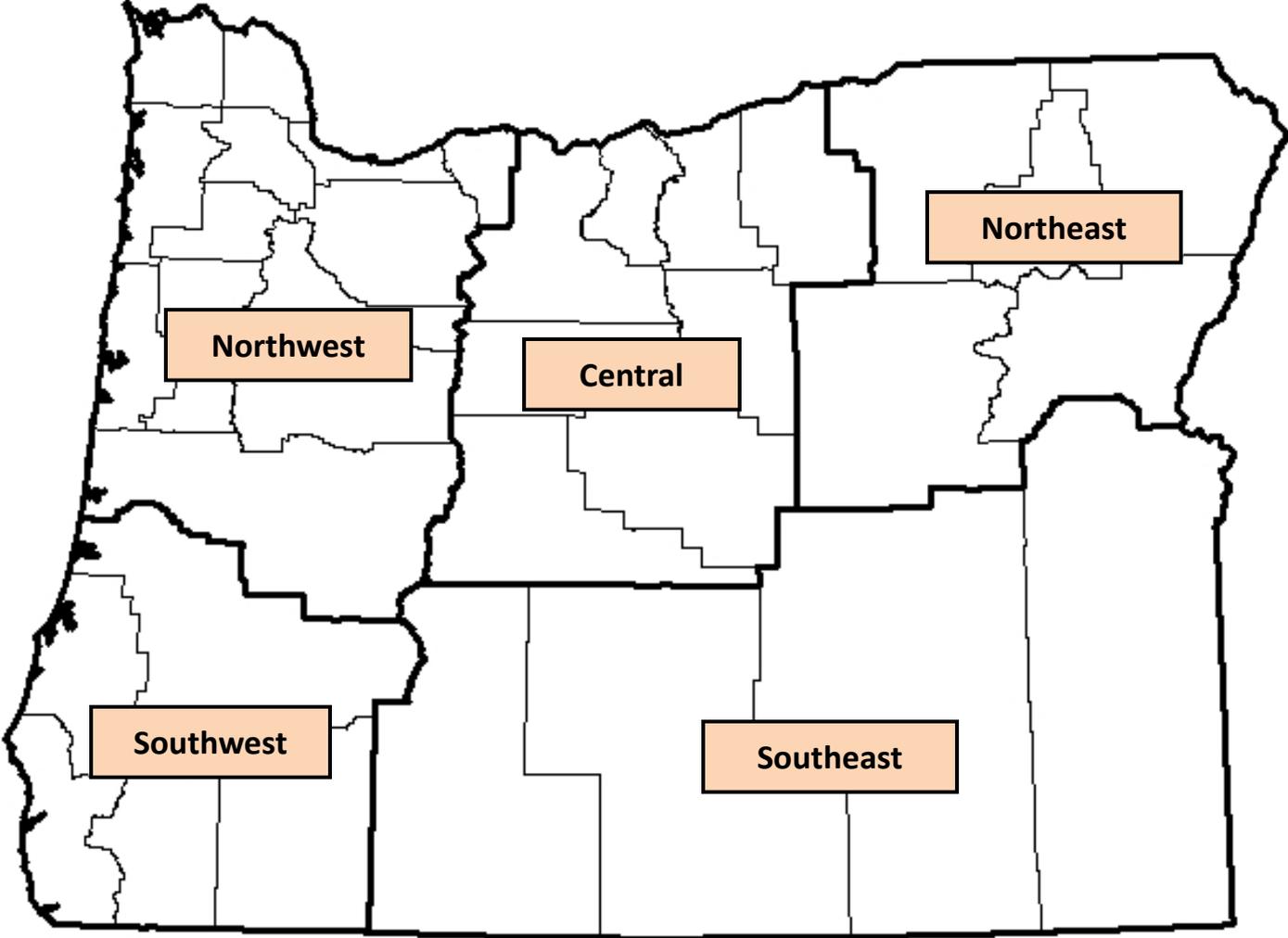
*BG = Block Group*

*EF = Emission Factor*

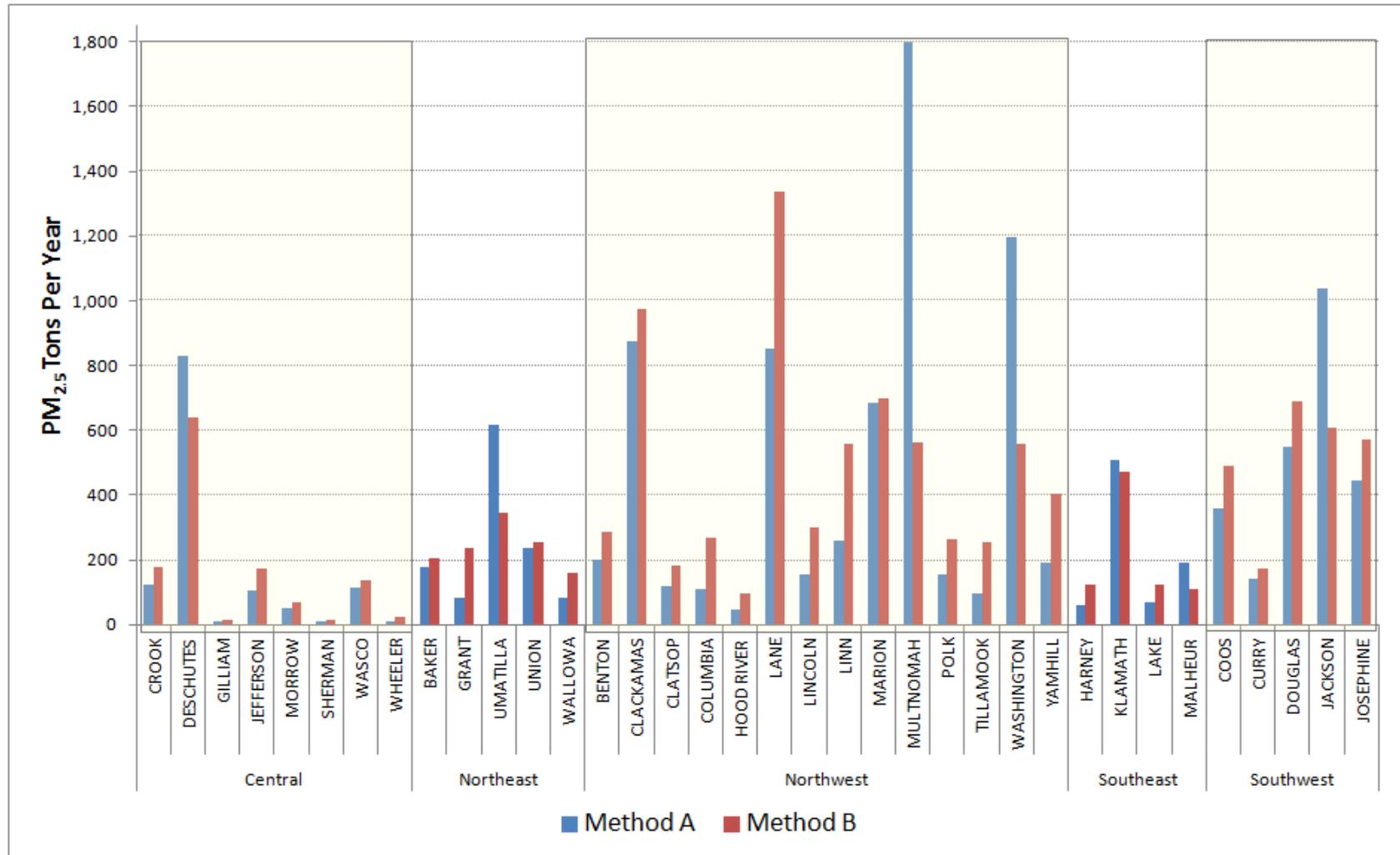
***Method A biased:***

***Counties with higher HU have higher emissions***

# Oregon Statewide RWC Survey Regions



# Oregon 2008 RWC PM<sub>2.5</sub> Emissions Estimates by County





# NW Airquest Presentation

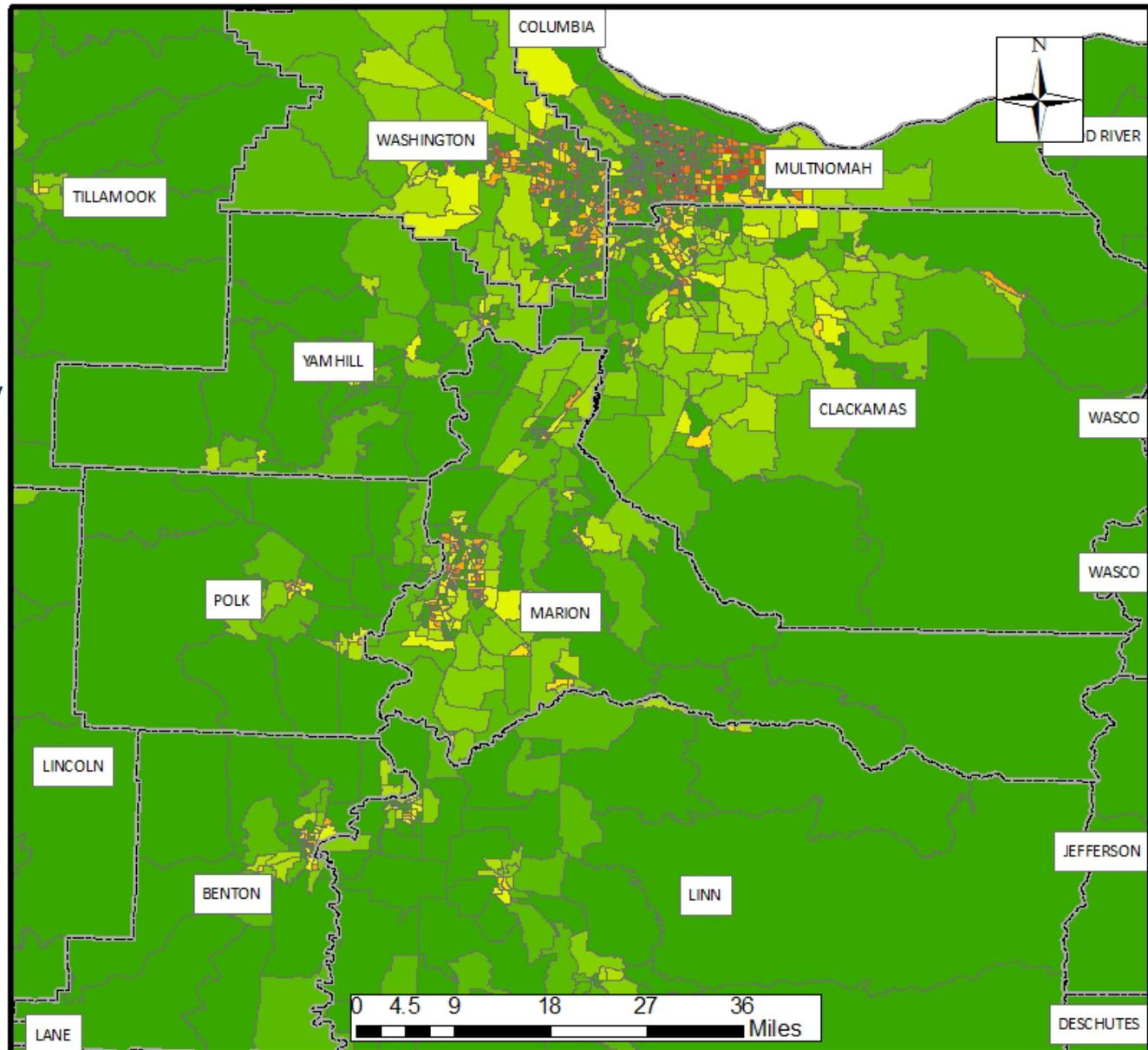
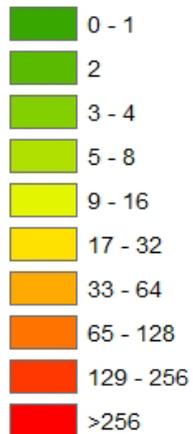
2008 Oregon RWC  
PM2.5 Emissions  
Spatial Allocation  
to Census Block Group:  
Northern Willamette Valley

## Legend



### Method A

lbs/acre per year





# NW Airquest Presentation

2008 Oregon RWC  
PM2.5 Emissions  
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Northern Willamette Valley

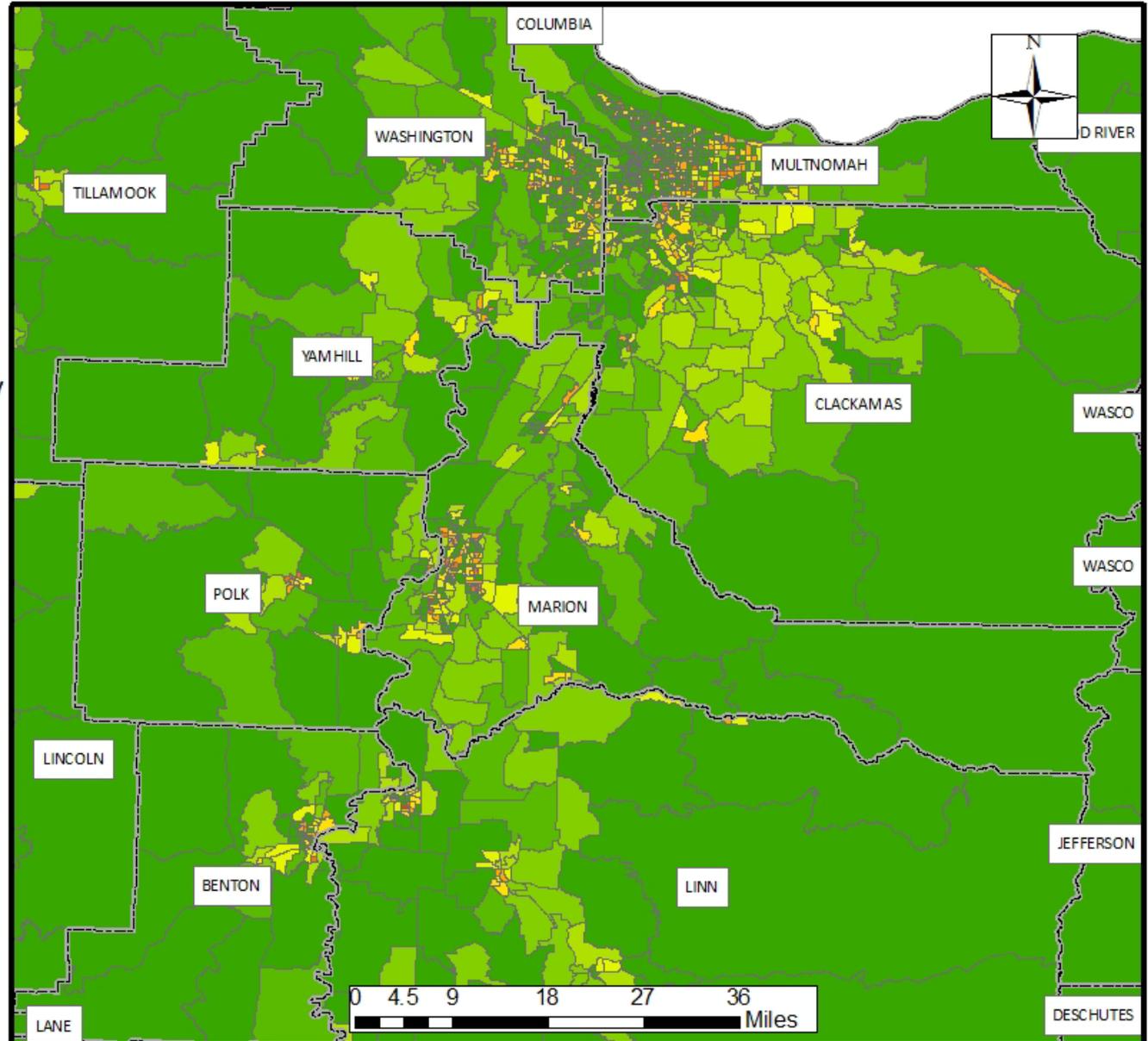
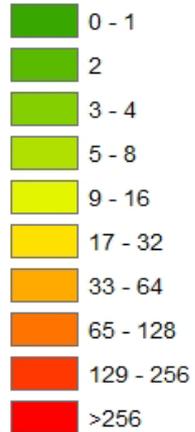
## Legend



County

## Method B

lbs/acre per year





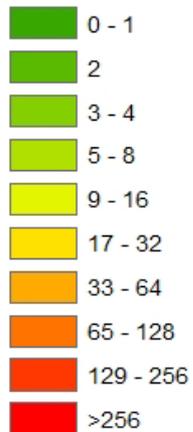
# NW Airquest Presentation

2008 Oregon RWC  
PM2.5 Emissions  
Spatial Allocation  
to Census Block Group:  
Portland Metro Area

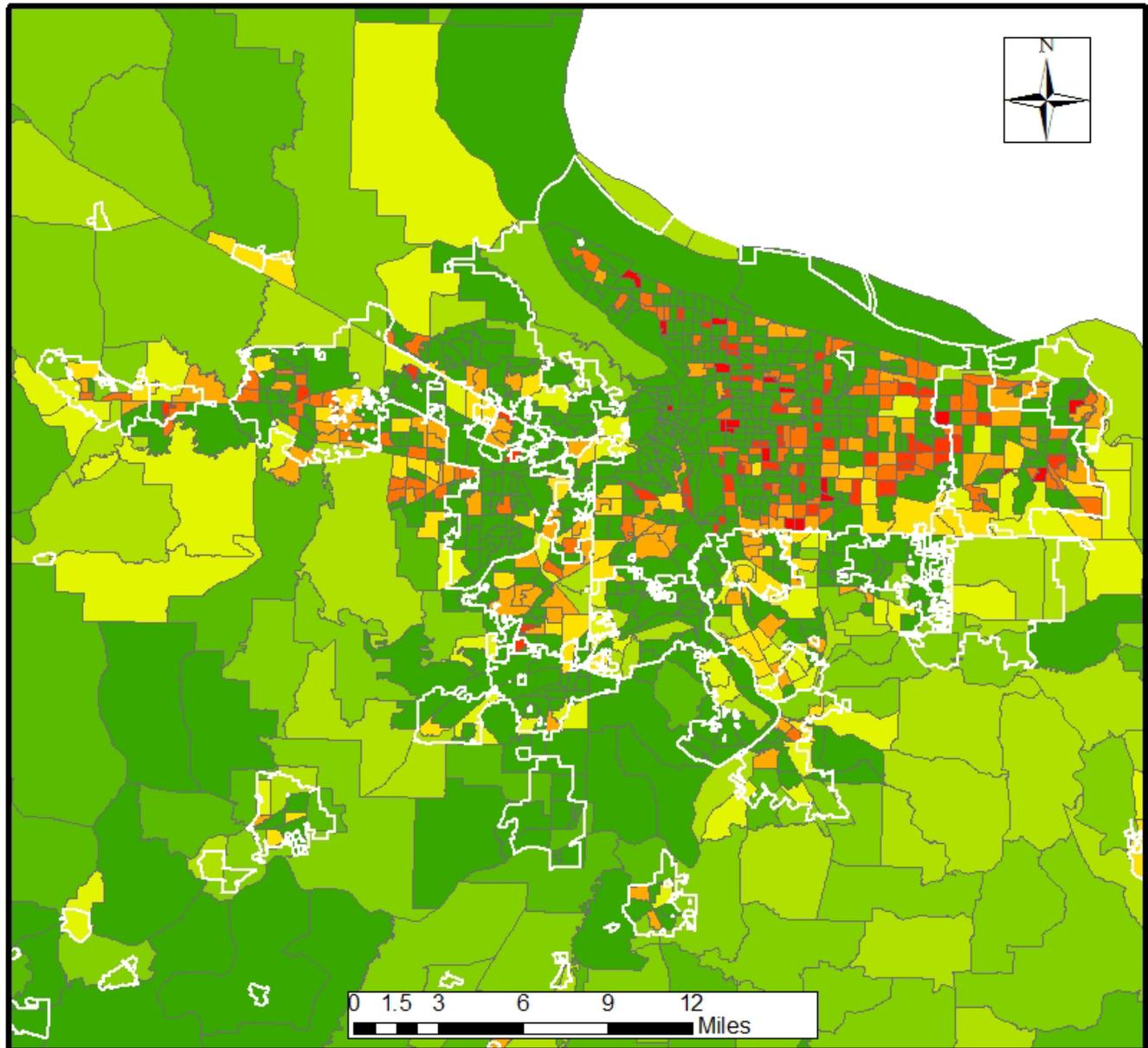
## Legend

### Method A

lbs/acre per year



White boundary =  
city limits



C. Swab 5/17/12

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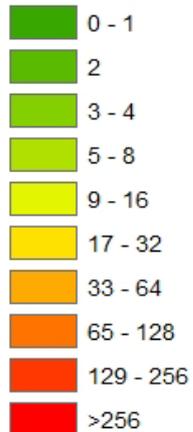
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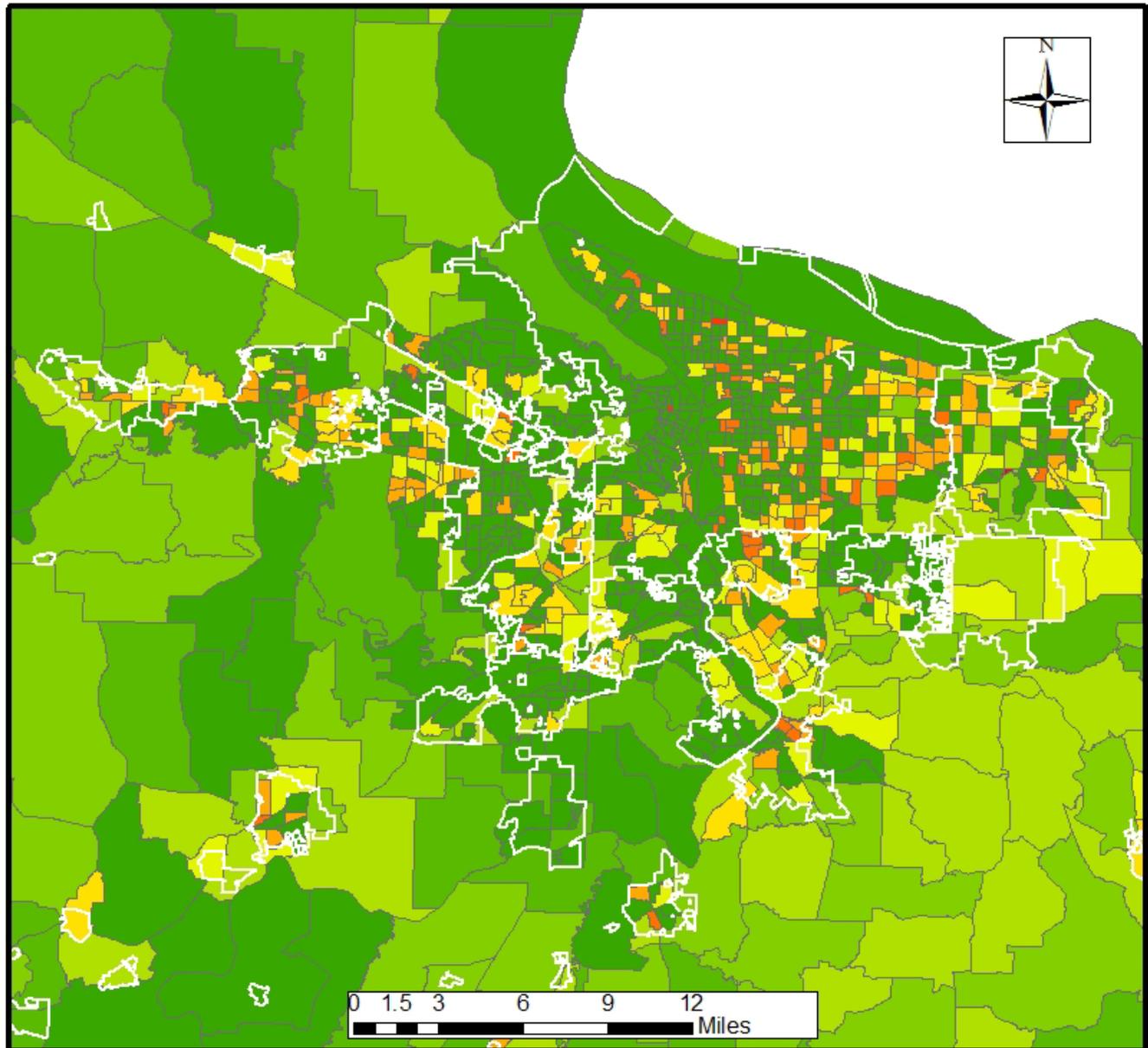
## Legend

### Method B

lbs/acre per year



White boundary =  
city limits



C. Swab 5/17/12

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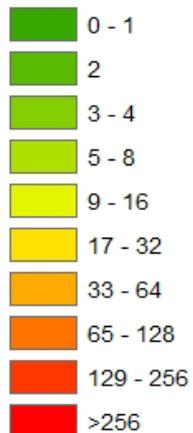
# NW Airquest Presentation

2008 Oregon RWC  
PM2.5 Emissions  
Spatial Allocation  
to Census Block Group:  
Eugene/Springfield Area

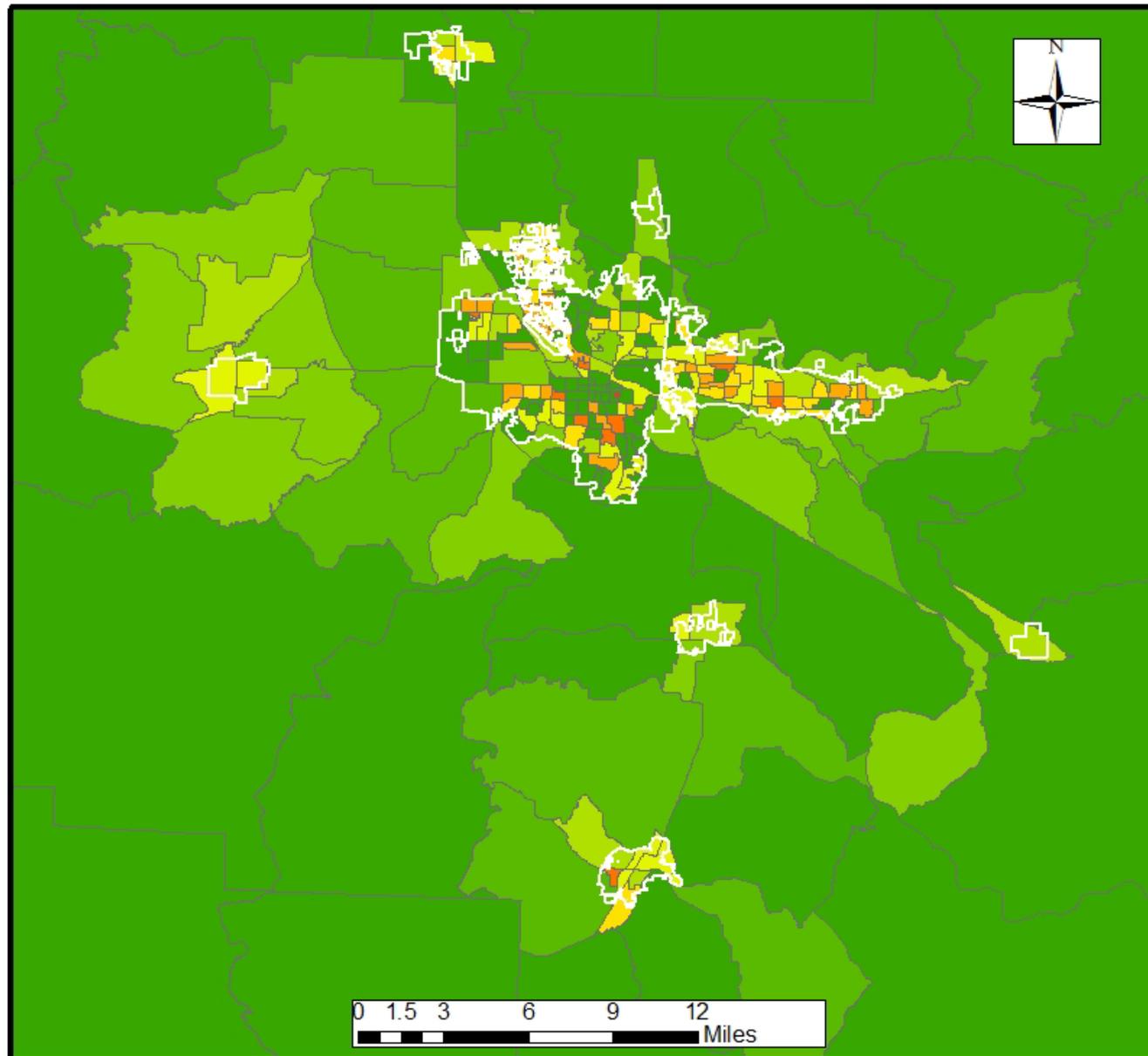
## Legend

### Method A

lbs/acre per year



White boundary =  
city limits





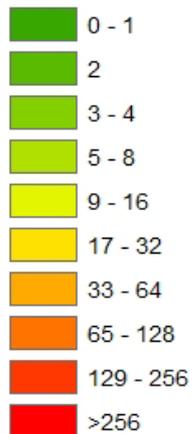
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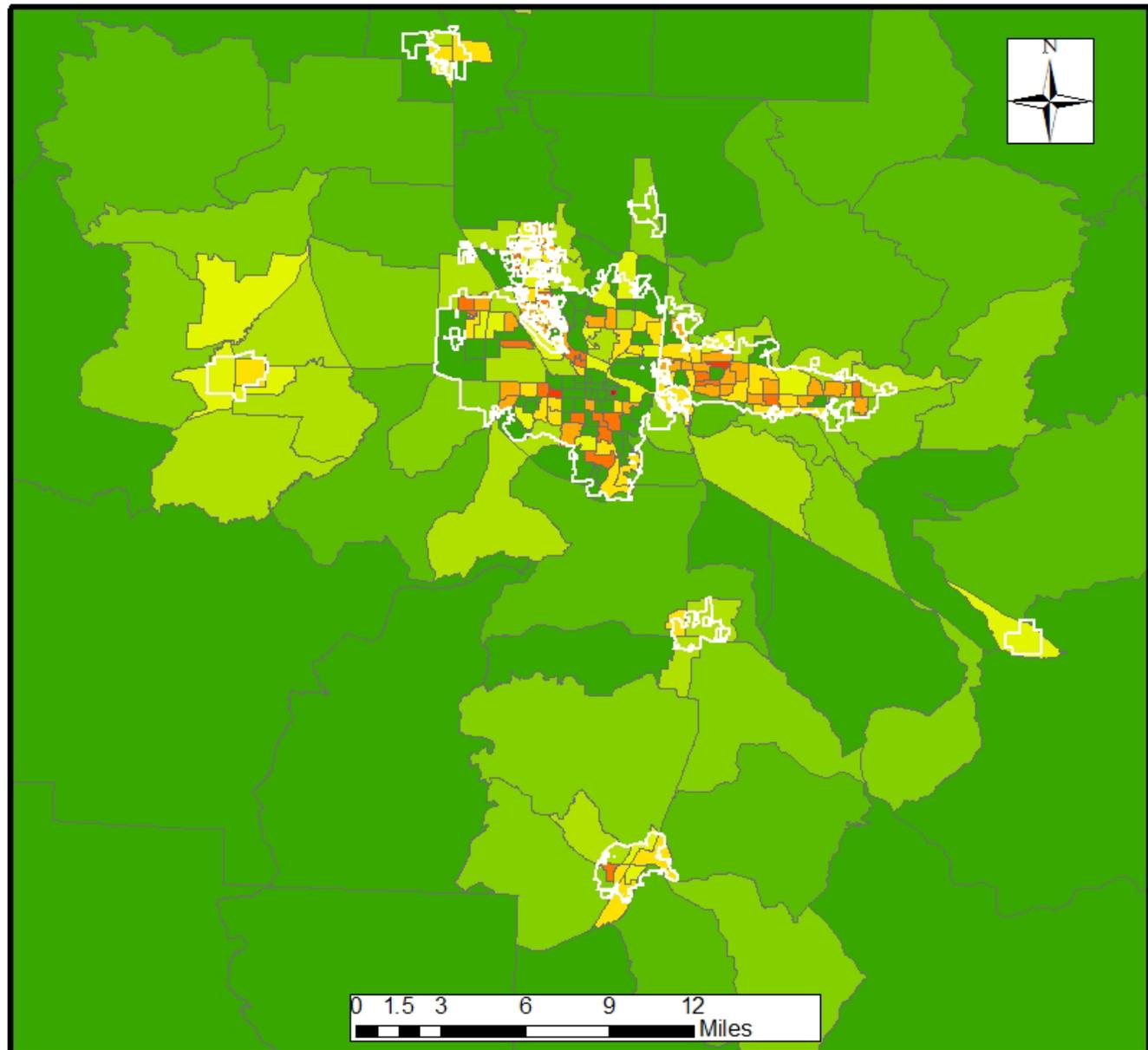
## Legend

### Method B

lbs/acre per year

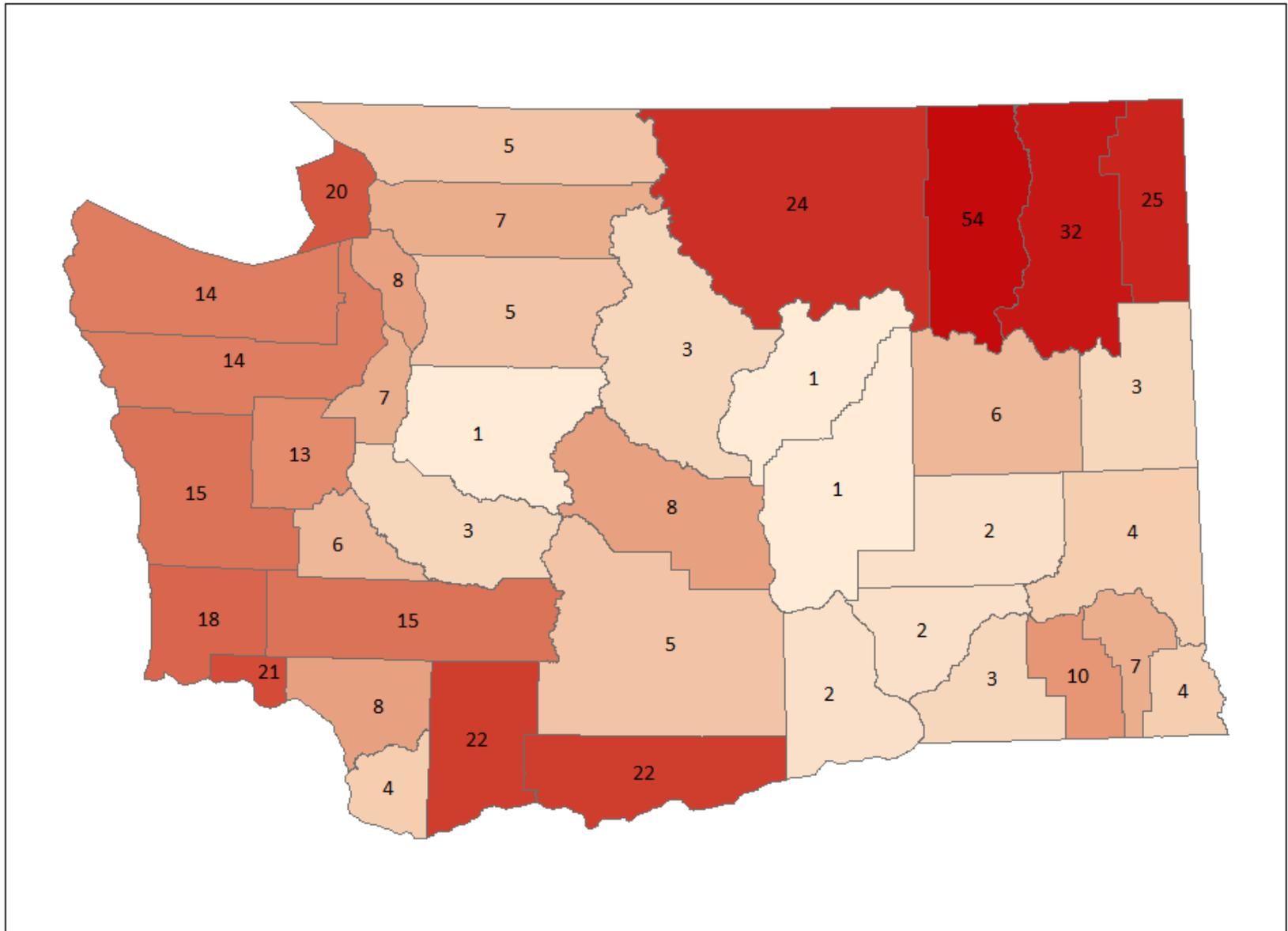


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city limits

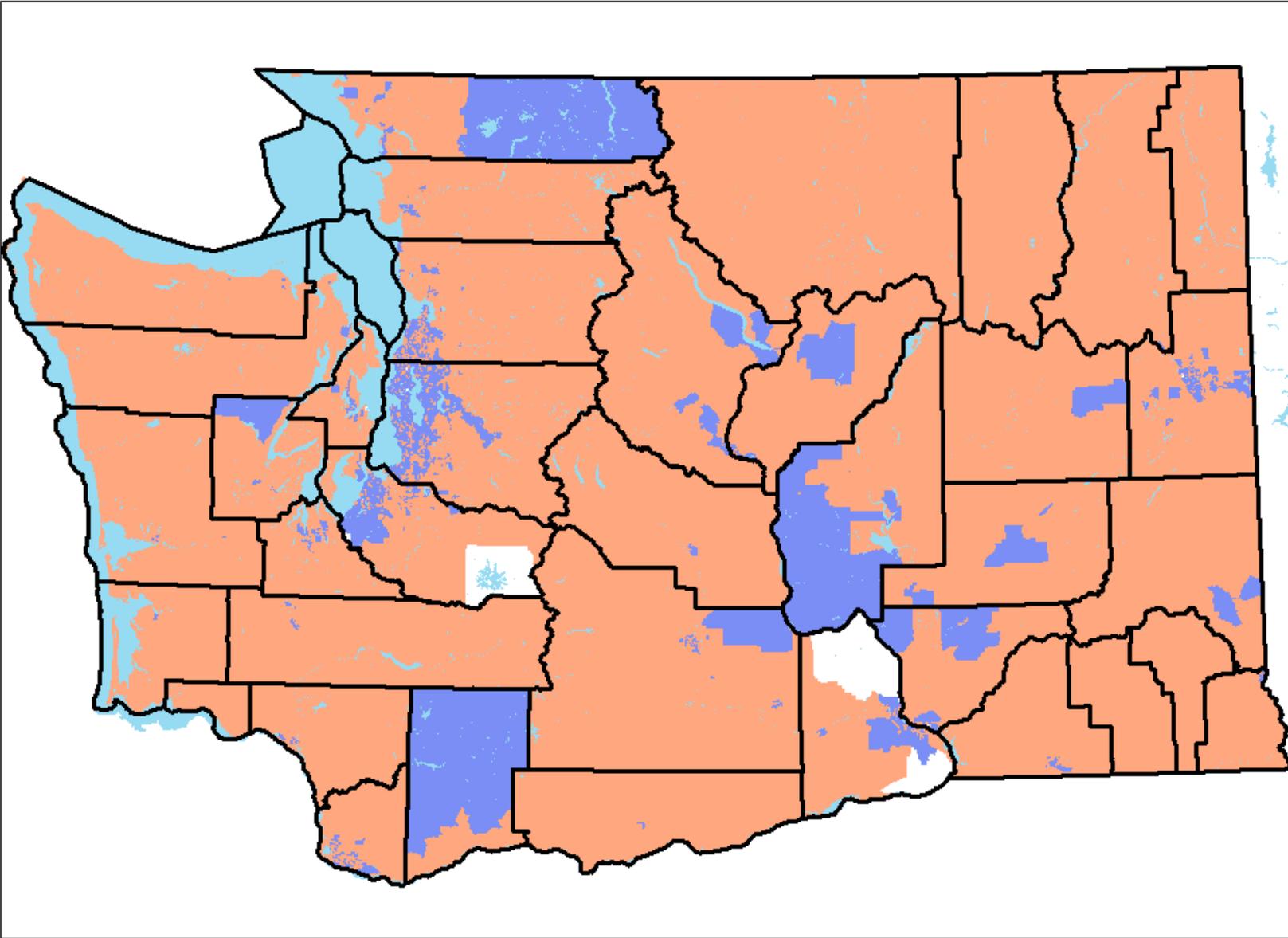




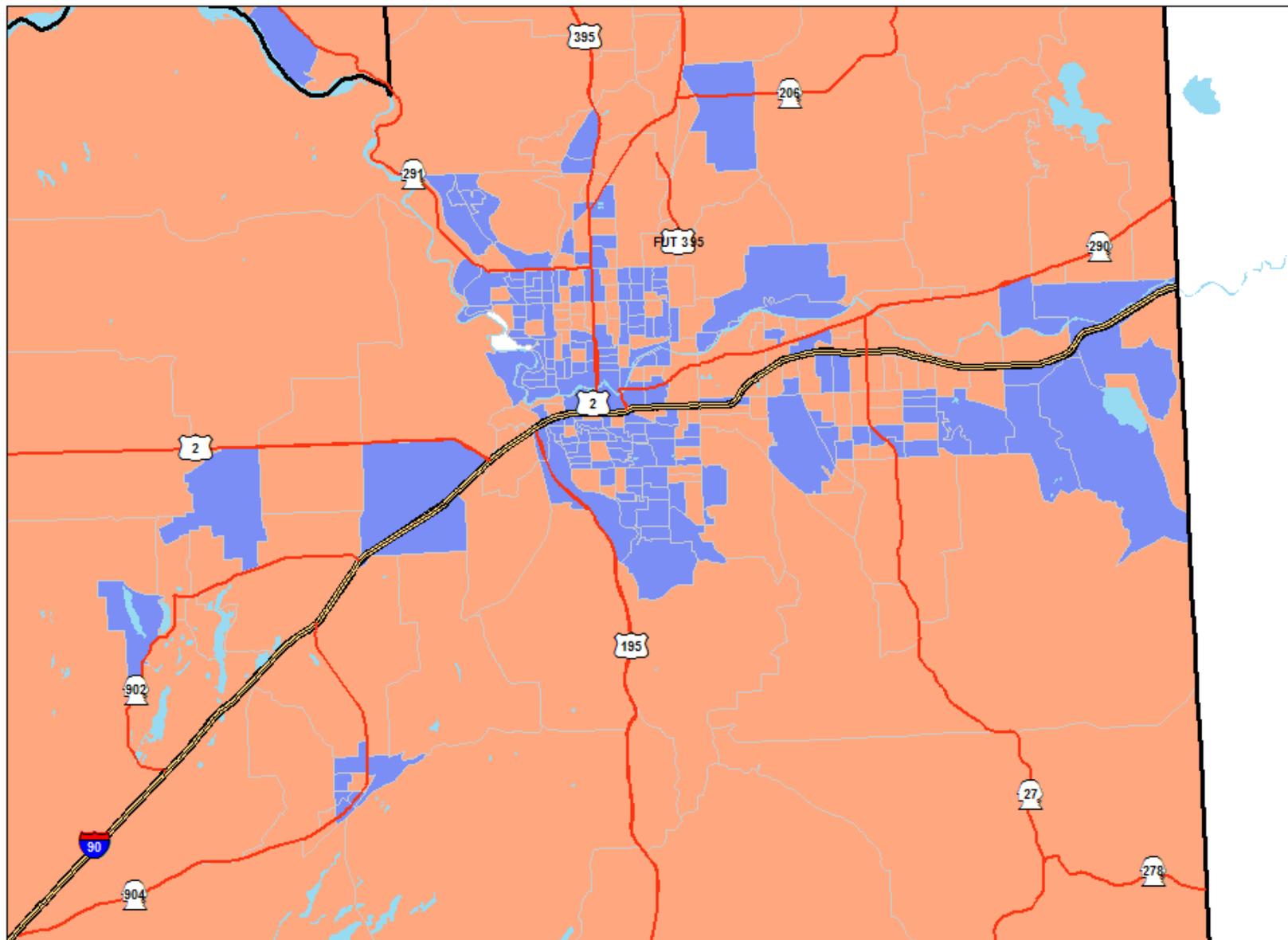
# Primary Wood Heating Households Percent



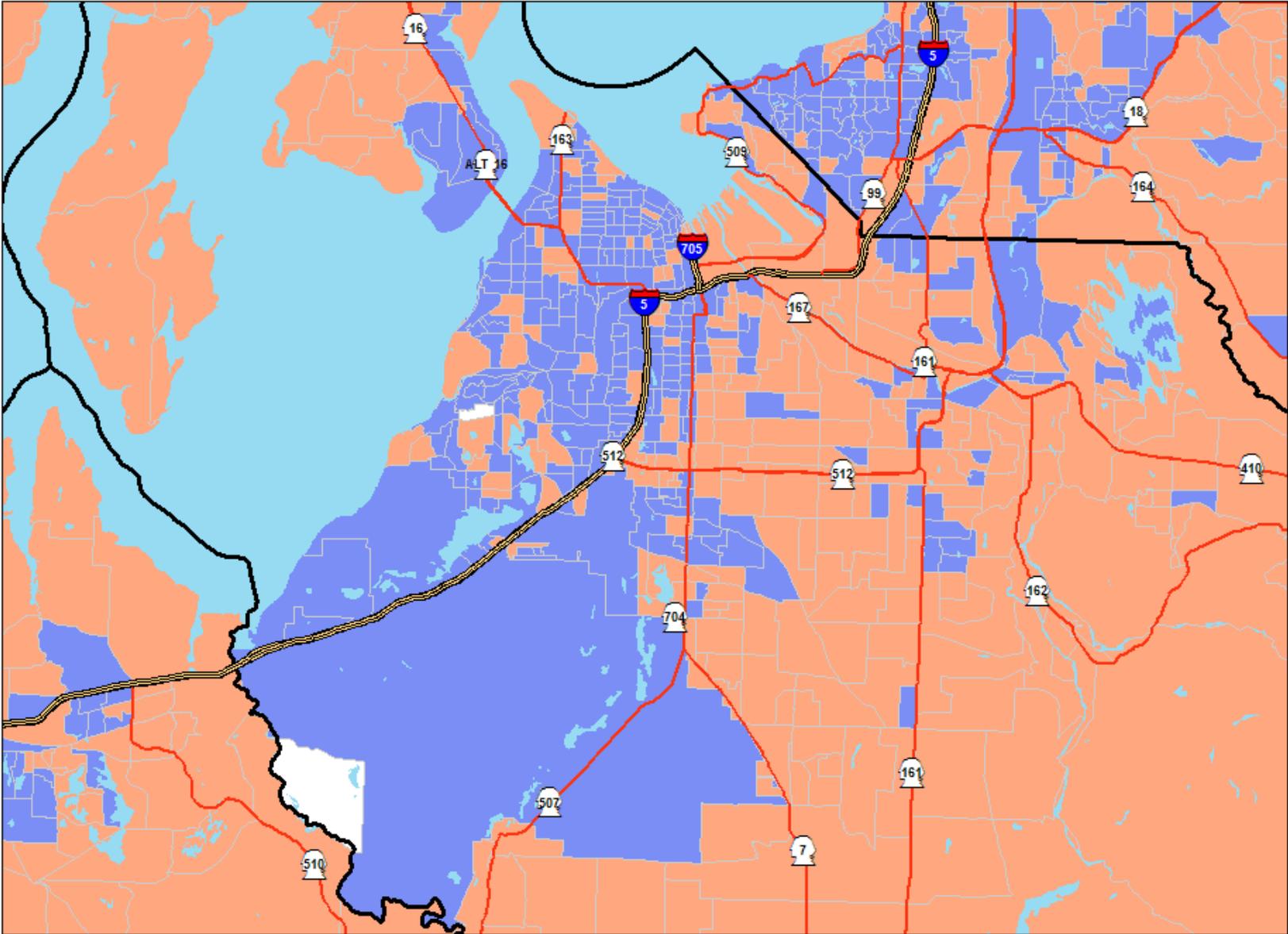
Primary Wood Burning Households (orange) Overlaid on Total Households (blue)  
(2005-2009 average)



Primary Wood Burning Households (orange) Overlaid on Total Households (blue)  
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Primary Wood Burning Households (orange) Overlaid on Total Households (blue)  
(2005-2009 average)



## Contact Info:

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