

MOVES Default Database Tables

Virginia Department of Environmental Quality

**MARAMA MOVES Workgroup conference call
September 23, 2014**

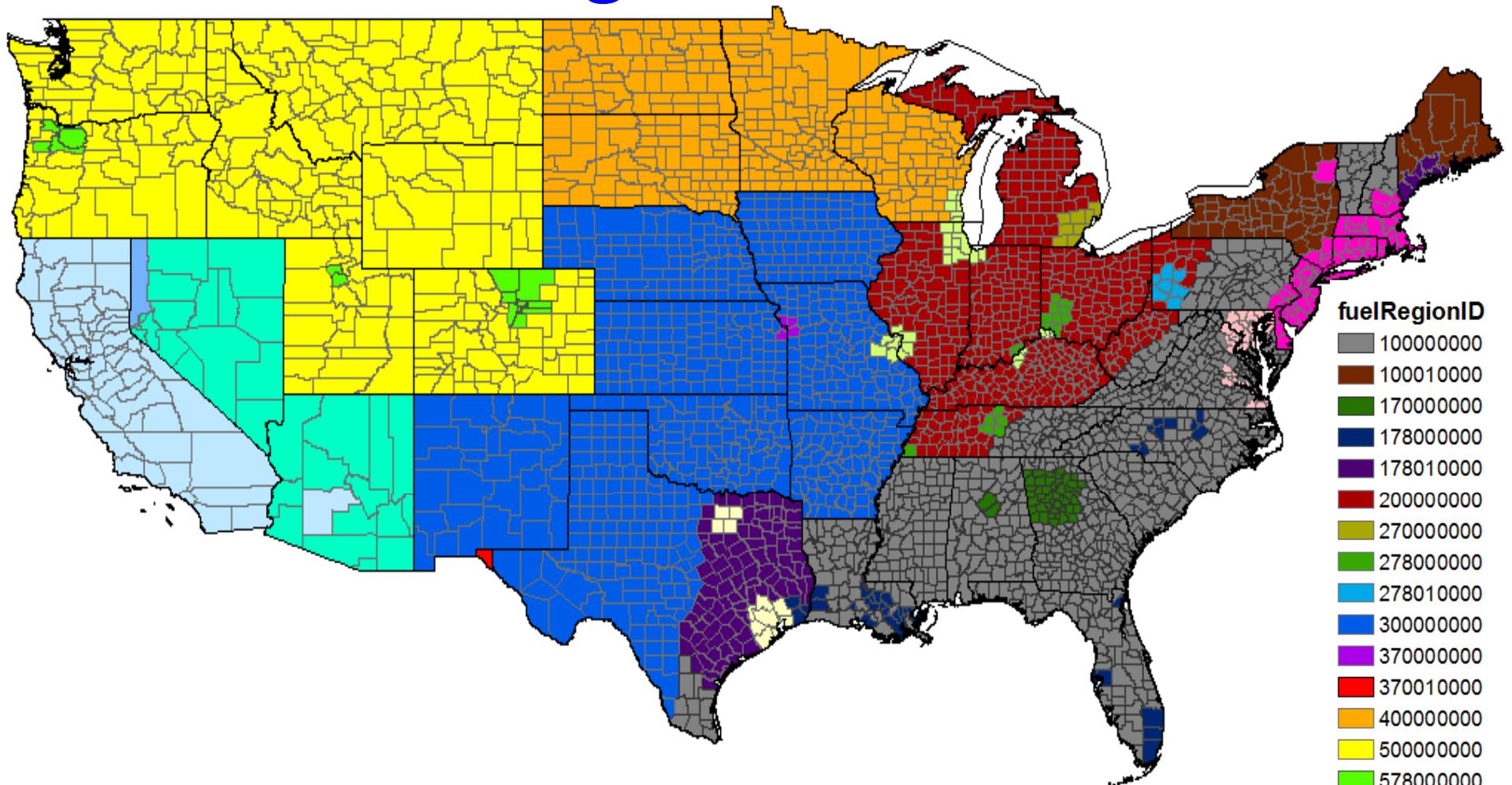
Spatial Resolution in MOVES Default Database

Input	MOVES default table name	MOVES2010b table resolution	MOVES2014 table resolution
database name		movesdb20121030	movesdb20140731
VMT	hpmsvtypeyear	national	national
VPOP	sourcetypeyear	national	national
age distribution	sourcetypeagedistribution	national	national
fuel usage fraction	fuelusagefraction	N/A	county
fuel supply	fuelsupply	county	fuel region
I&M	imcoverage	county	county

1. Resolution is assumed “**national**” if table contains no geographical info (such as countyID)
2. **Fuel usage fraction** is a new input in MOVES2014
3. A new column field “**fuelregionID**” is now required in MOVES2014

County defaults cannot be extracted if resolution is at the national level

New FuelRegionID in MOVES2014



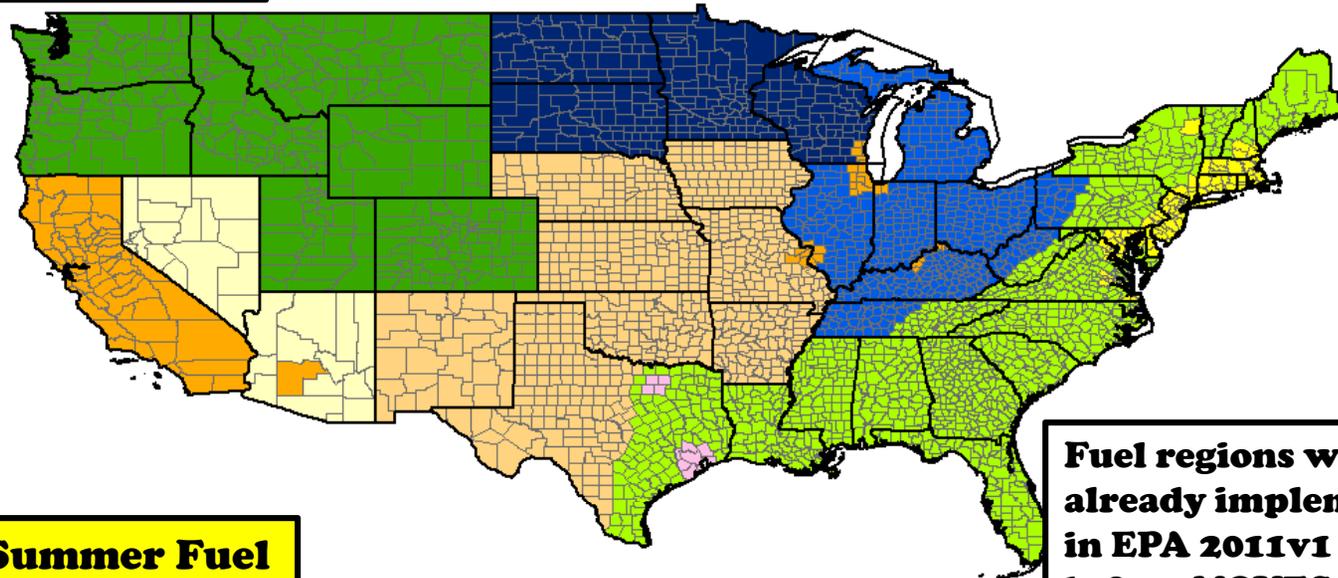
- fuelRegionID is a required field in MOVES2014;
- There are 22 distinct fuelRegionIDs;
- This plot was constructed using the **regioncounty** table in **moves20140731**

RVP in 2011 NEI version 1

County boundaries are similar to page 3

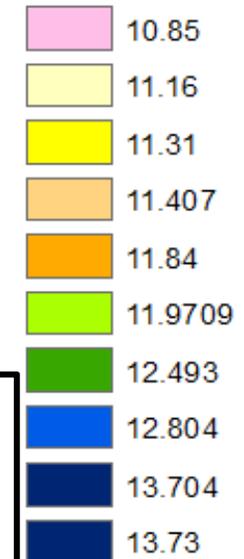
winter RVP > summer RVP

Winter Fuel



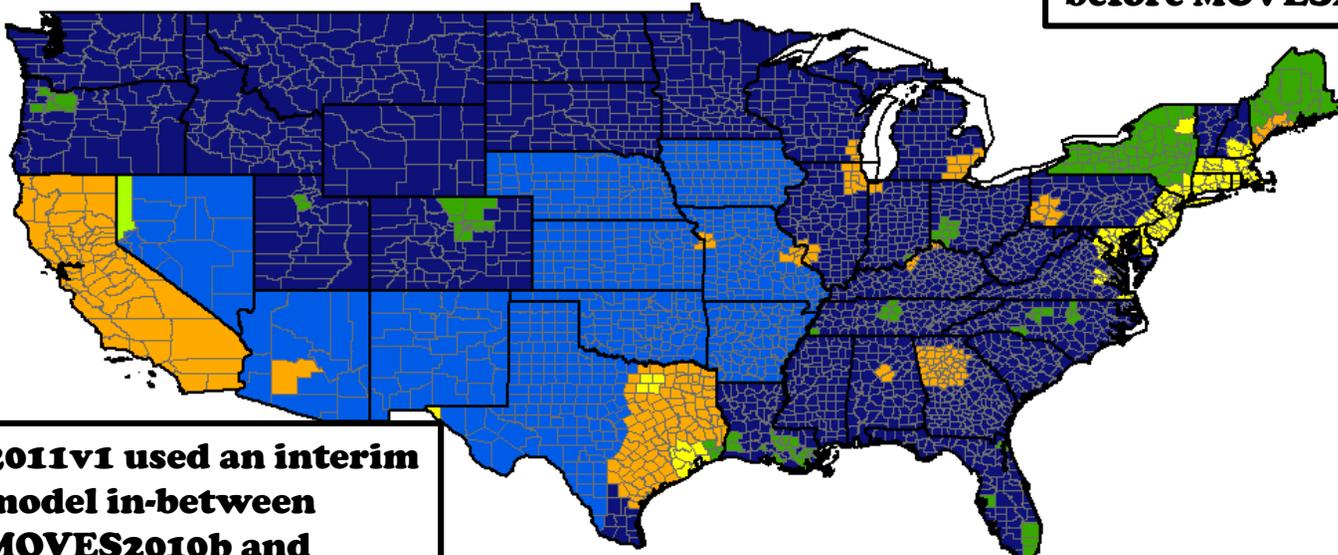
RVP (psi)

RVP FuelMonth1



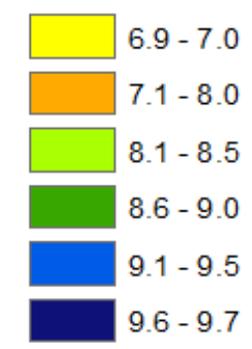
Fuel regions were already implemented in EPA 2011v1 - long before MOVES2014

Summer Fuel



RVP (psi)

RVP FuelMonth7



2011v1 used an interim model in-between MOVES2010b and MOVES2014

This slide is taken from March 20, 2014 presentation

Issues

- **MOVES default tables for activity data (VMT, VPOP, age distribution) are in national resolution (i.e., not county-specific)**
- **County data are built in, hard coded, or calculated internally in MOVES**
- **No easy way to pull county default data other than conduct MOVES runs for each individual county**
e.x. VA: 134 counties, CONUS > 3220 counties
- **County defaults thus cannot be examined or verified easily**
 - **Have CRC A88 data been incorporated in MOVES2014?**
 - **CRC A88 data included only a few source types, what are the county defaults for the other source types?**

EPA please comment