

# SCOPE

- Washington, Oregon, Idaho, & Western Montana
- Commercial New Construction & Major Remodels (subject to energy code)
- Constructed between 2016-2021

# METHODS

- Single Stage Sampling Plan
- Requested >500 permits from regional permitting jurisdictions
- Cataloged:
  - 300 building sites representing NW 6 years of new construction activity
  - 2,000 HVAC units
  - Additional focus on VRF, DHP, ASHP, and other DX Cooling

# RESULTS

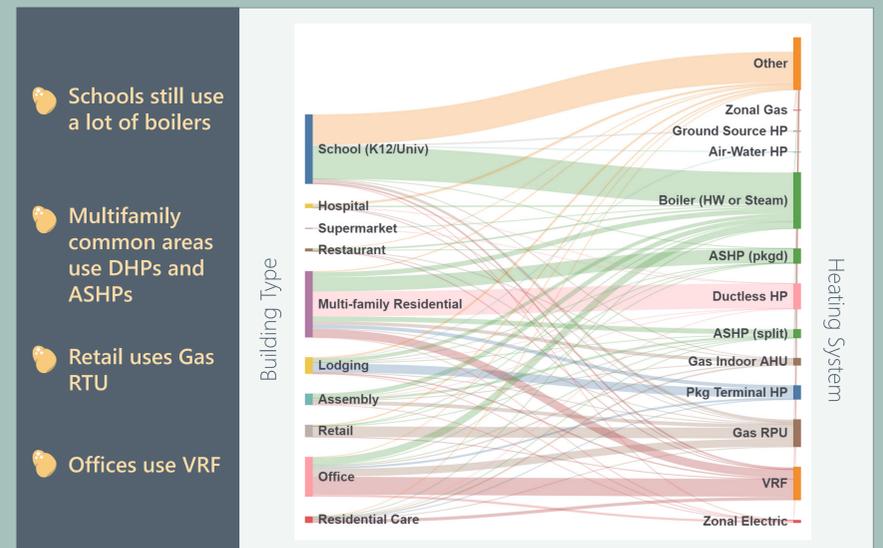
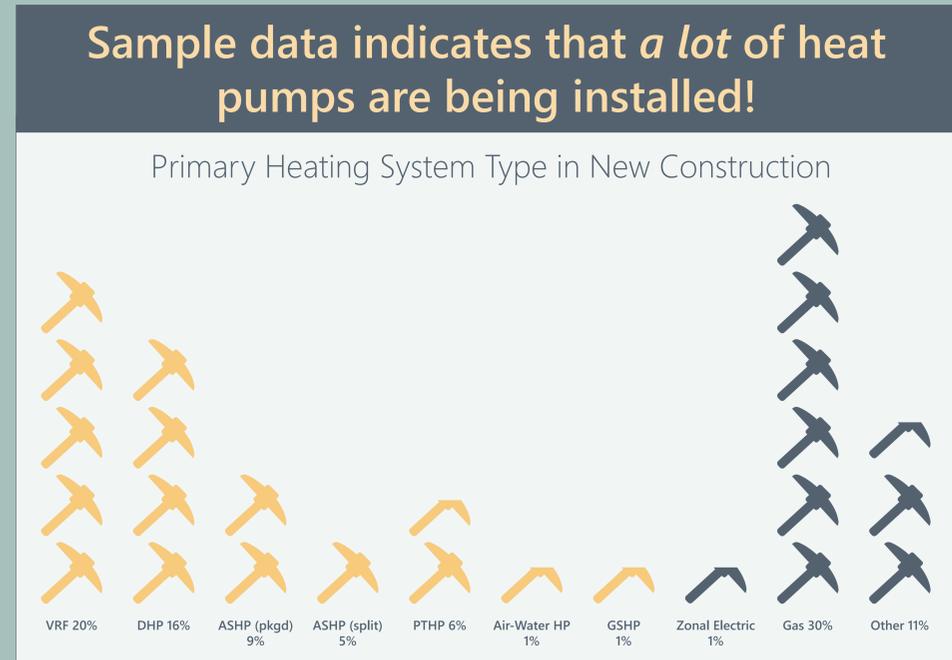
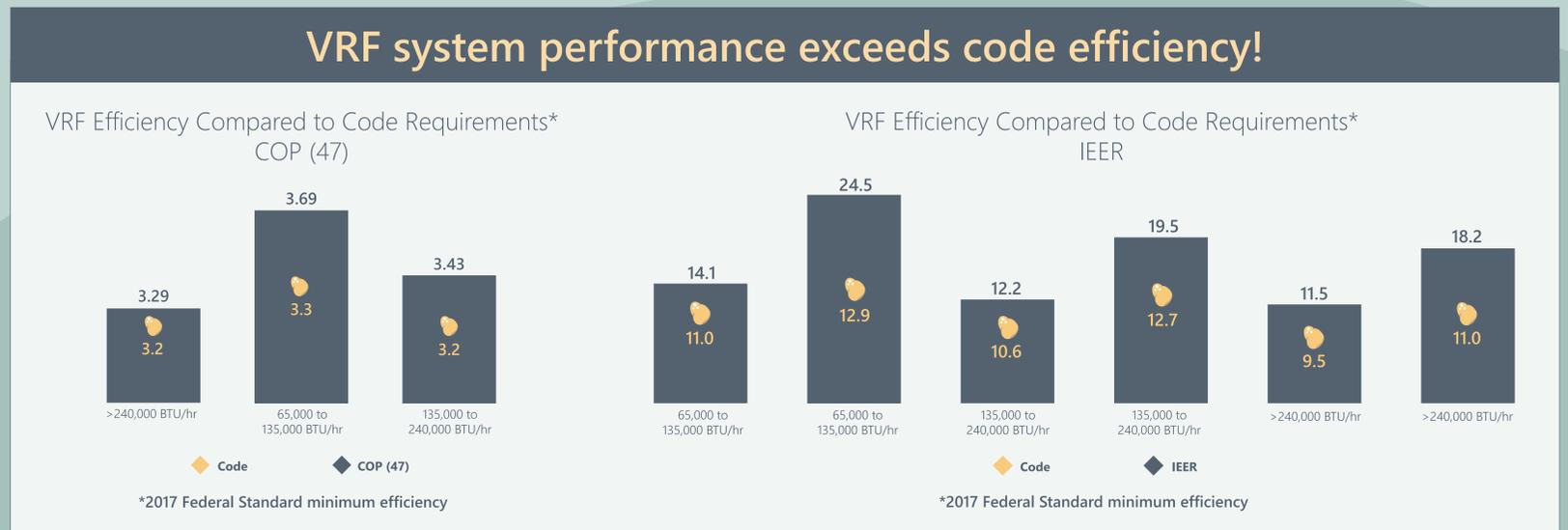
- Public permits have a wealth of new construction information!
  - System selection
  - HVAC efficiency
  - Code compliance paths
  - Fuel choices
  - Building type trends
- Using public permits is representative of installed HVAC systems, less expensive and invasive than on site surveys, and can capture multi-year data
- Resulting data set, lessons learned memo, and ACEEE paper can be found on BPA's website:



# IS THERE GOLD IN THEM THAR' HILLS?



## Mining Public Records for Commercial HVAC Details



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