

Advancing Energy Efficiency in Residential Buildings

March 27, 2023

Climate Action Steering Committee

Why residential energy efficiency?

Residential energy use makes up 1/3 of region's emissions

Energy Efficiency

Directly reduces greenhouse gas emissions

Supports a transition to renewable energy

Addresses existing building stock



What is the role of residential energy efficiency in the TCMP?

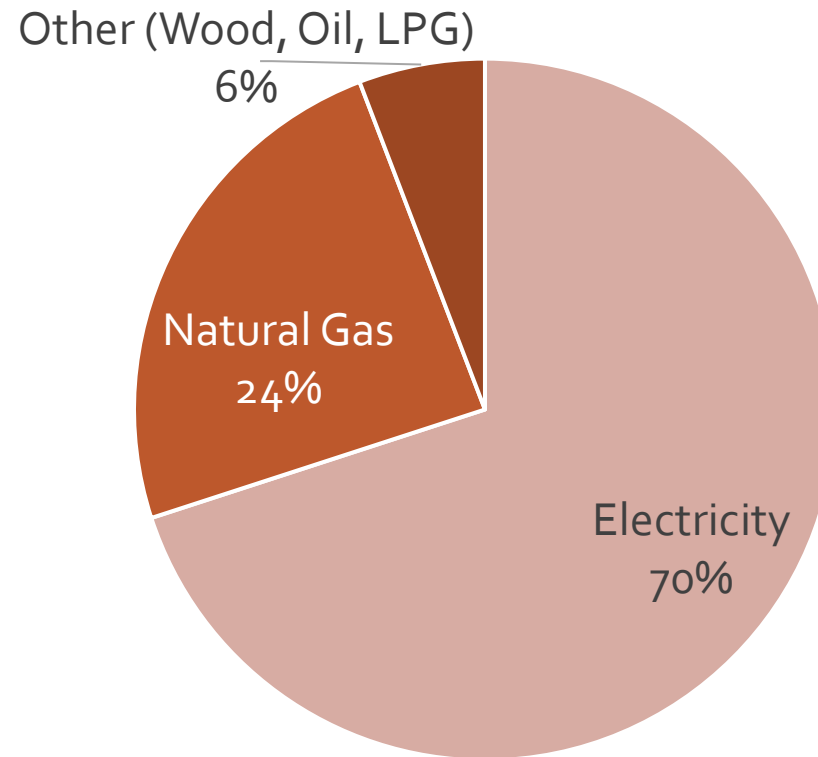
- **Strategies**

- **Strategy B1:** Reduce energy use in existing residential buildings.
 - Residential energy performance ratings (B1.1)
 - Residential energy audits (B1.2)
 - Rental housing energy efficiency incentives (B1.4)
 - Property tax credit (B1.5)
 - Rental housing energy efficiency baseline (B1.6)

- **Targets**

Fuel	2030	2050
Electricity	-20%	-30%
Natural Gas	-20%	-50%
Other Fuels	-10%	-20%

Thurston County Residential Emissions, by Fuel Source (2021)

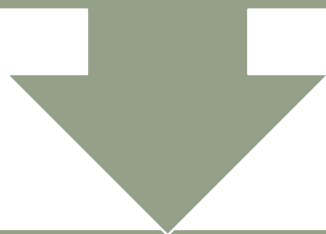


- Source: 2021 Greenhouse Gas Emissions Inventory for Thurston County

Thurston County Housing Stock

- Total housing: **124,400** dwelling units
- **70%** in urban areas
 - 16% in Lacey, Olympia, Tumwater UGA
- **65%** single-family homes
 - Dominant in rural Thurston County (76%)
 - Olympia has most multifamily units
- **11%** manufactured homes
 - Majority in rural Thurston County (60%)
- **34%** households rent
 - Highest in Olympia (53%)
 - Lowest in rural Thurston County (21%)

Thurston County
Average annual energy cost: **\$1,712**



Thurston County residents

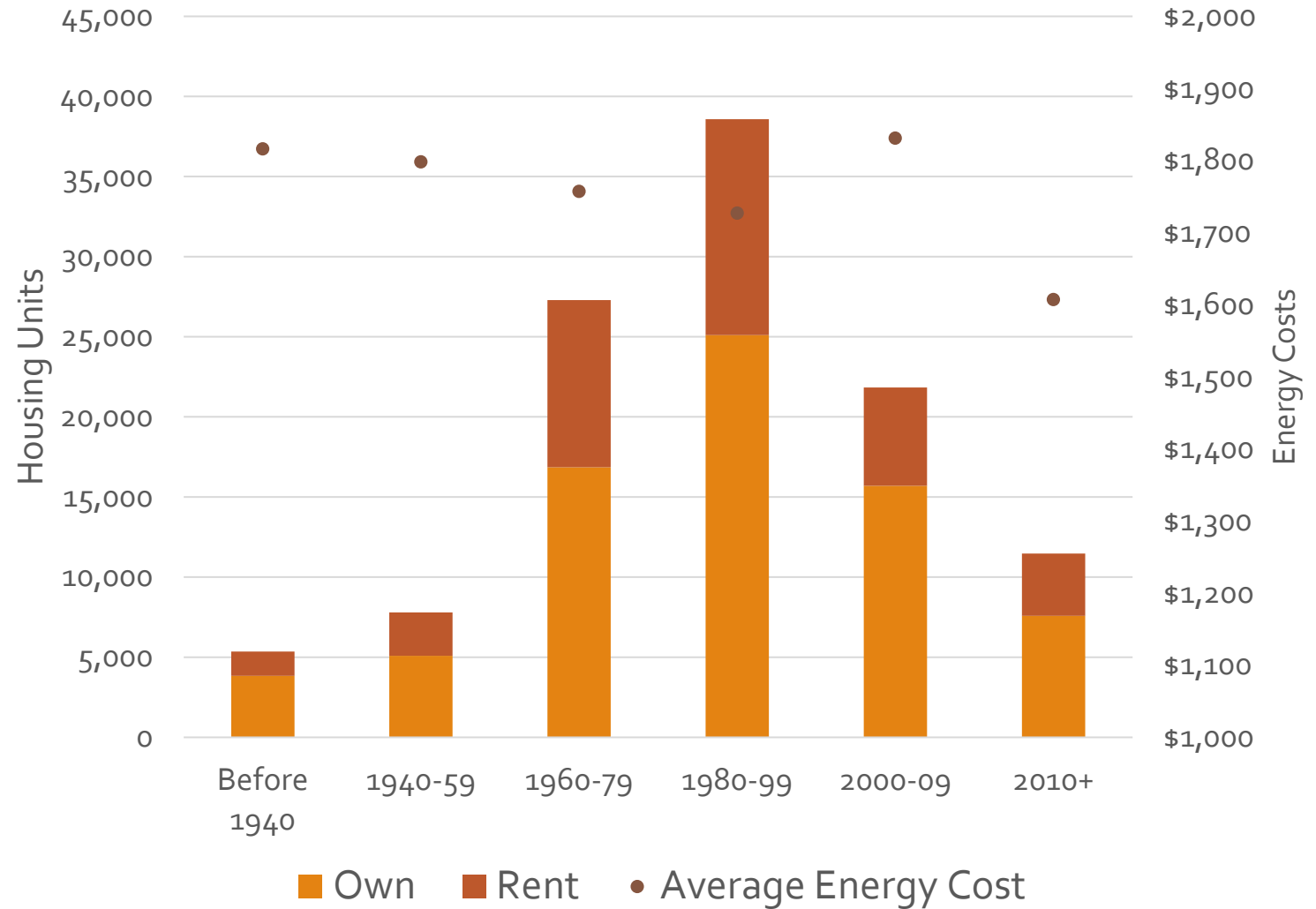
13% - High energy
burden

7% - Severe energy
burden

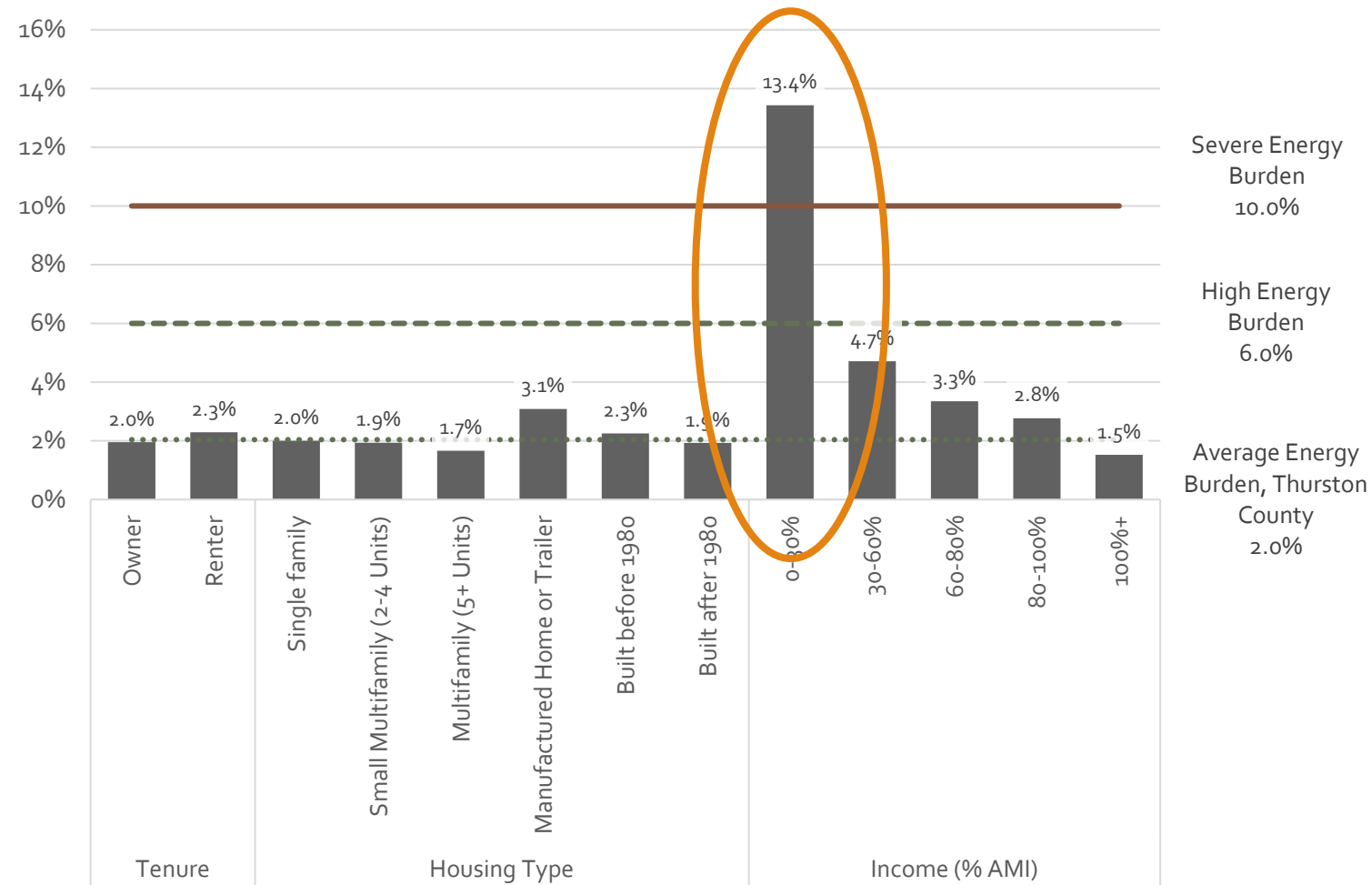
Energy Burden =
% of household
income spent on
home energy
costs

6% = High energy
burden
10% = Severe
energy burden

Thurston County Energy Costs/Age of Home



- Source: U.S. Census Bureau, American Community Survey 2016-2020 Average; U.S. Department of Energy, Low-Income Energy Affordability Data - LEAD Tool, 2020



Thurston County Energy Burden

- Source: U.S. Dept of Energy, 2020, Low-Income Energy Affordability Data - LEAD Tool

Existing & New Resources

* = for low-income
+ = extra benefit for low income

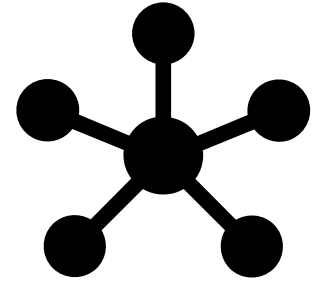
- **Energy Retrofit Programs**
 - Weatherization Assistance Program*
 - Weatherization Plus Health*
 - HOMES Rebate Program – under development
- **Utility Incentives**
 - Consumer rebates +
- **Tax Incentives**
 - Federal
 - Energy Efficiency Home Improvement Credit +
 - Residential Clean Energy Property Credit +
 - High-efficiency Electric Home Rebate
 - State
 - Improvements to single-family homes (no EE focus)
 - Multi-family Tax Exemption (no EE focus)

Existing & New Resources

- **Benchmarking & Performance Standards**
 - Clean Buildings Act – Building Performance Standard
 - Applies to commercial and large multifamily
 - **Other Funding**
 - Energy Efficiency Block grants and other block grants
 - Greenhouse Gas Reduction and Climate Pollution Reduction funds (EPA)
 - Climate Commitment Act (Ecology)
- Many funding programs are specifically targeting low income and historically disadvantaged communities

What actions could TCMP partners take?

- Coordination
 - Tracking rulemaking
 - Funding opportunities
- Outreach/Technical assistance
 - Connect residents with resources
- Financial incentives
- Regulatory
 - Build on state programs; address gaps



Potential focus areas for TCMP partners

- Reducing energy burden and barriers
 - Low-income households
 - Manufactured homes, rural areas
- Older buildings vs newer
- Strategies for owners and renters
- Strategies for single family, multifamily, and manufactured homes
- Pairing efficiency with electrification, renewables

➤ Emphasis may be different in different jurisdictions

Thank You!

Staff Contact

Allison Osterberg, Senior Planner

www.trpc.org/climate

climate@trpc.org