

Appendix A: Enhanced Energy Planning Data

Appendix A: Energy Data



Population

Total Populationⁱ (2015): 9,258
 Proj. Annual Avg. Growth Rateⁱⁱ: ↓ 0.00269
 Population Density: 187 persons/square mile



Households

Owner-Occupied Unitsⁱⁱⁱ: 2,657
 Renter- Occupied Unitsⁱⁱⁱ: 1,246
 Total Householdsⁱⁱⁱ: 4,324
 Avg. Household Sizeⁱⁱⁱ: 2.28 people/household



Businesses^{iv}

Total businesses in Springfield: 301
 Employees working in Springfield: 4,328
 Average wage: \$43,899



Heating

Residentialⁱ (see figure)
 Businesses^v:
 Estimated avg. building space: 11,017 sq. ft.
 Total energy use: 167.7 billion BTUs
 Estimated total annual cost: \$4 million
 Avg. annual cost per business: \$13,290



Transportation

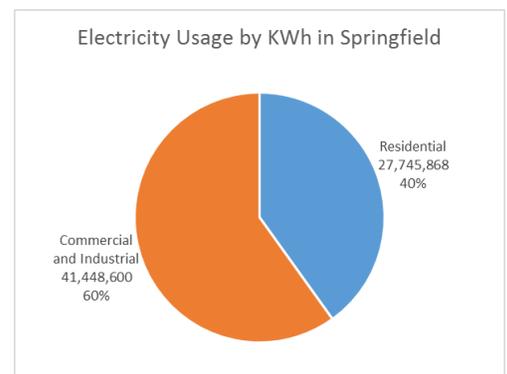
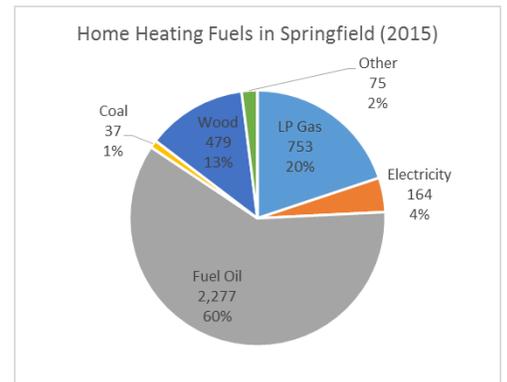
Number of vehicles: 6,245
 Estimated vehicle miles traveled: 105.6 million
 Estimated gal. fuel used per year: 5.7 million
 Estimated fuel cost per year: \$13.1 million
 Residents driving alone to work: 81%
 Average commute time: 21 minutes



Electricity Use

Electricity Usage in 2015^{vi} (see figure)
 Avg. Residential Usage: 6,921 KWh
 Total Usage (2014-2016): ↑ 136,355 KWh
 ↑ 0.2%

Springfield



Appendix A: Energy Data



Energy Generation

Existing Renewable Energy Generation

Solar	59 sites	3.6 MW	4,415 MWh
Wind	1 site	0.001 MW	3 MWh
Hydro	5 sites	1.3 MW	4,555 MWh
Biomass	0	0	0

Renewable Energy Generation Targets^{vii}

2015 (Baseline)	8,973 MWh
2025	15,596.5 MWh
2035	31,193 MWh
2050	62,386 MWh

Potential for Renewable Energy Generation^{viii}

Rooftop Solar	7.18 MW	8,806 MWh
Ground-Mounted Solar	369.05 MW	452,603 MWh
Wind	34 MW	104,244 MWh
Hydro	0.01 MW	35 MWh

ⁱ U.S. Census Bureau, American Community Survey (ACS) 2011-2015

ⁱⁱ Based on Scenario B population projections for 2030 (VT ACCD, 2013)

ⁱⁱⁱ U.S. Census Bureau, Decennial Census (2010)

^{iv} Vermont Department of Labor Statistics (2015)

^v Estimated based on number of units, estimated floor space, heating fuel types and average fuel costs for 2015. Floor space was estimated from average commercial/manufacturing floor space per employee from the U.S. Energy Information Administration.

^{vi} Efficiency Vermont (2017)

^{vii} SWCRPC

^{viii} Based upon an analysis of GIS data mapping data (i.e. land area shown on the solar and wind potential maps)