Memorandum

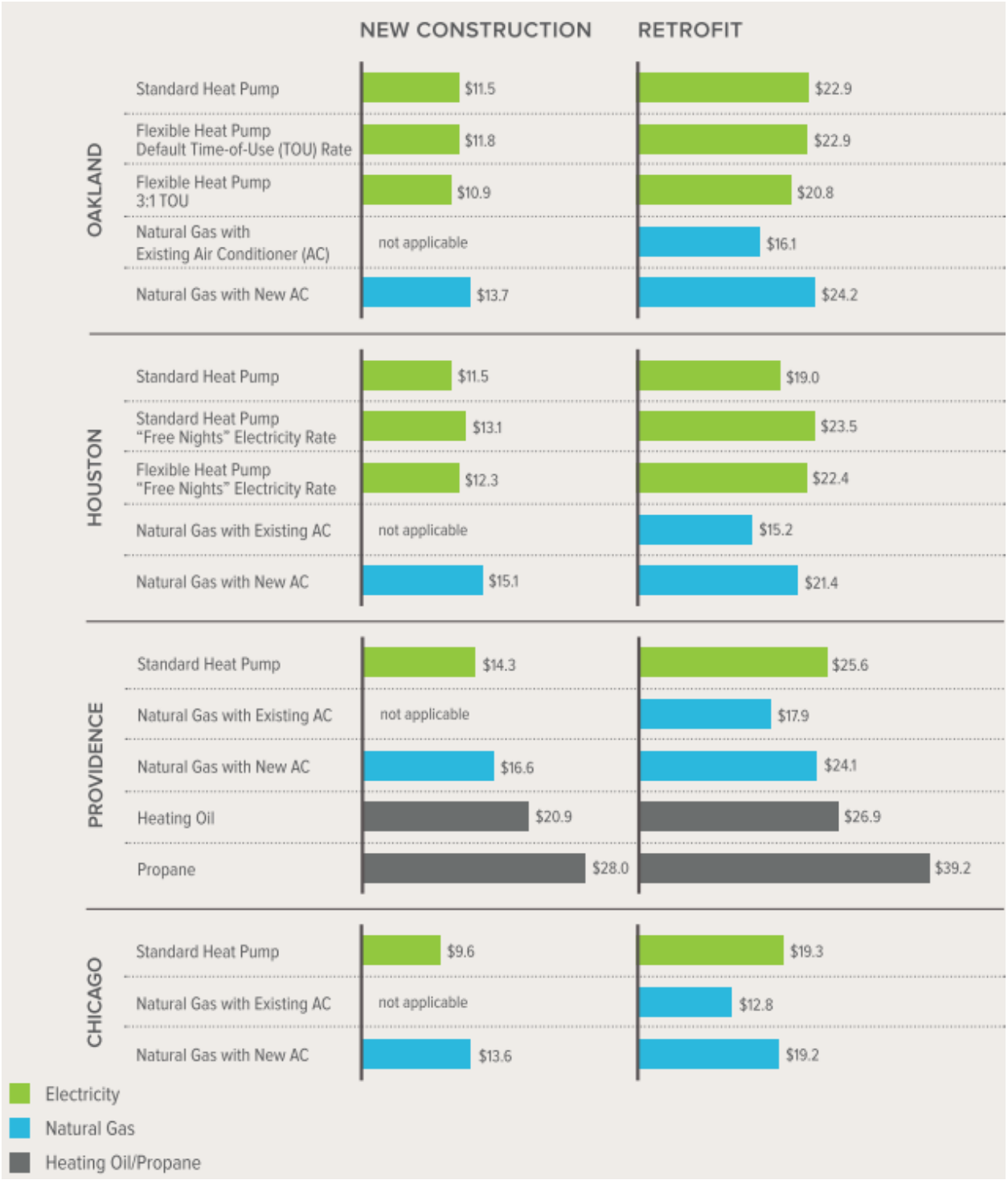
To: Erie Town Council
From: Eryka Thorley, Sustainability Manager
Date: January 30, 2026
Re: Resilience Action Plan Questions Raised

Cost Impact of Energy Efficiency Codes and Building Electrification:

Although the Resilience Action Plan does not propose specific changes to the Erie building Codes, to address Council Members' concerns with the cost of codes on housing costs, staff conducted a search of information on the topic. There are conflicting reports about the impact of energy efficiency codes and building electrification efforts on the cost and price of homes, as well as the life cycle cost of such measures. The Common Sense Institute (CSI) published The Uncertain Future Cost of Colorado's Energy and Housing based on information from a study conducted by Black Hills Energy that looked at costs of utility infrastructure for retrofitting houses to go all electric, as well as of cost of "behind the meter" costs. The Black Hills Energy study showed total electrification cost per housing unit would range from $32,000 to $37,000. That study did not look at avoided costs for gas infrastructure for new builds, nor did it look at comparative energy costs.

The CSI report also summarized the result of a study the Louisville City Council asked Group 14, a Colorado-based consulting firm with expertise in built environment projects, to prepare a cost analysis to understand the cost differential to build to both the 2018 and 2021 IECC for fire affected homes. Group 14 estimated the cost to upgrade to meet the different iterations of the 2021 IECC (with or without Appendix RC) would incur additional costs to homeowners anywhere from $6,450 - $22,352 per home. The Group 14 study also did not evaluate avoided costs for gas infrastructure for new builds, nor did it look at comparative energy costs. As of early 2025 roughly 70% of those rebuilding from the Marshall Fire had built to 2021 IECC code or stronger code requirements.

The Rocky Mountain Institute (RMI) published The Economics of Electrifying Buildings. That study compared the 15-year net present costs of water hearing and space conditioning in both new construction and retrofit all-electric homes compared to gas homes in four housing markets. It showed costs for all-electric new construction were lower in all cases but retrofit costs were higher in all cases. The summary table of that study is shown below.



The American Council for an Energy Efficient Economy (ACEEE) published a report noting that In States With Strengthened Building Energy Codes, A Quarter Million New Homes Rise, suggesting that strengthened energy codes have not slowed homebuilding. That report concluded, "Modern building energy codes are a key housing affordability tool. By ensuring all new homes meet minimum standards for energy efficiency, codes save new and future residents money on utility bills and reduce the overall cost of housing." It also asserted, "[T]he updated code requires better insulation and air sealing, which significantly reduces heating and cooling costs. The bill savings each month dwarf the smaller increase in mortgage payments. Residents also are healthier, are more comfortable, and can stay safe for longer during extreme weather without heating or cooling, saving lives."

It is worth noting that neither costs nor savings to builders are necessarily passed on to home-buyers, since the market determines housing prices and builders will sell new homes at the highest price the market will bear.

Staff would appreciate Council direction on whether this information addresses Council Members' initial concerns regarding the Resilience Plan potentially increasing the costs of new development.

Additionally, a Council Member mentioned concerns with the plan's strategy suggesting the exploration of integrating agrivoltaics as a land use opportunity in future updates to the Unified Development Code. Staff hosted and invited Council to an agrivoltaics webinar with the Colorado Agrivoltaic Learning Center to more thoroughly explore this unique land use including its ability to enhance crop and animal resilience and increase economic opportunities for farmers. Staff ask for Council direction on this or any other amendments to the Draft RAP Council would like to see.

Based on Council direction, staff will prepare a final RAP for Council adoption. This will allow for plan transition to the next phase of exploring implementation with the new student group, as well as integration into the current Sustainability Action Plan update, which staff will bring to Council later this year.