Sustainable Shoreview

Energy Conservation & Efficiency Strategic Planning

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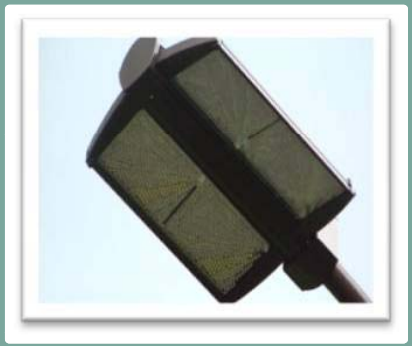
Project Overview

Methodology



Calculated payback scenarios for LED and HPS upgrades from MV

Inventoried and analyzed B3 Energy Use Data

Analyzed social survey data and created graphical representations of respondents

Findings: Streetlight Cost/Benefit Analysis

50W LED vs. 175W MV

- Use 70% less energy
- 70% emissions reduction

TWO barriers to economic feasibility:

- High price of LED fixture
  - —LED fixtures are 4x cost of HPS fixtures
- Xcel service meter charge
  - —$8/meter vs. monthly flat rate

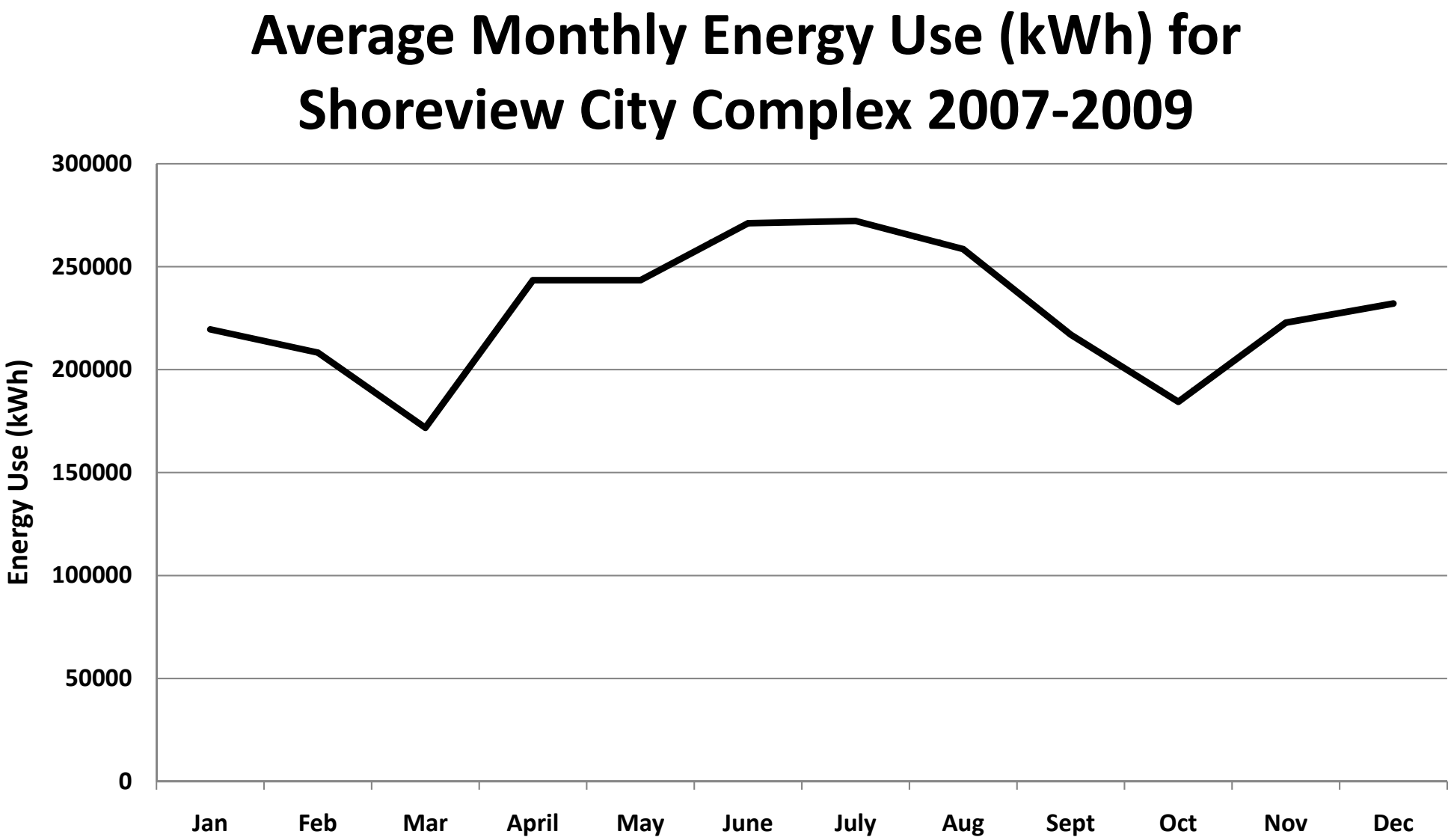
Recommendations: Streetlights

1. Negotiate a flat rate for LED streetlights

2. Monitor LED fixture prices

3. Integrate LED upgrades into the maintenance schedule

Findings: Energy Efficiency of City Complex



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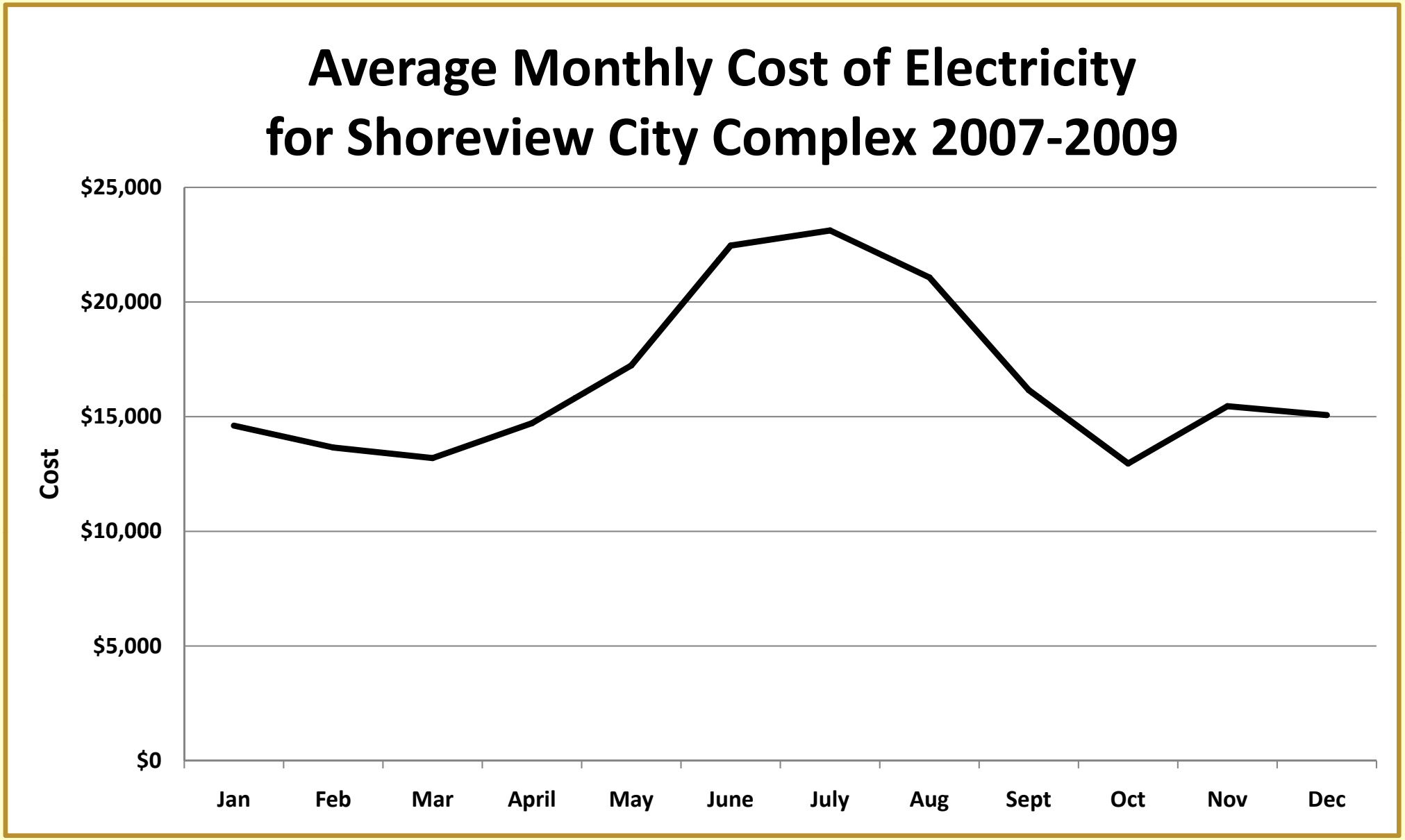

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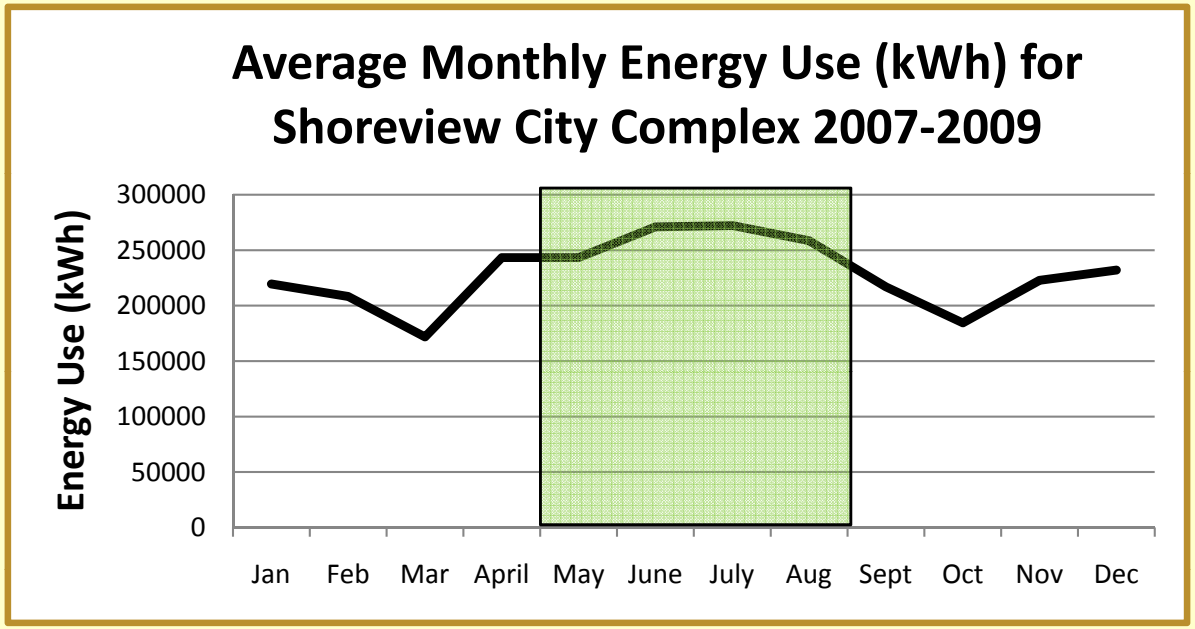
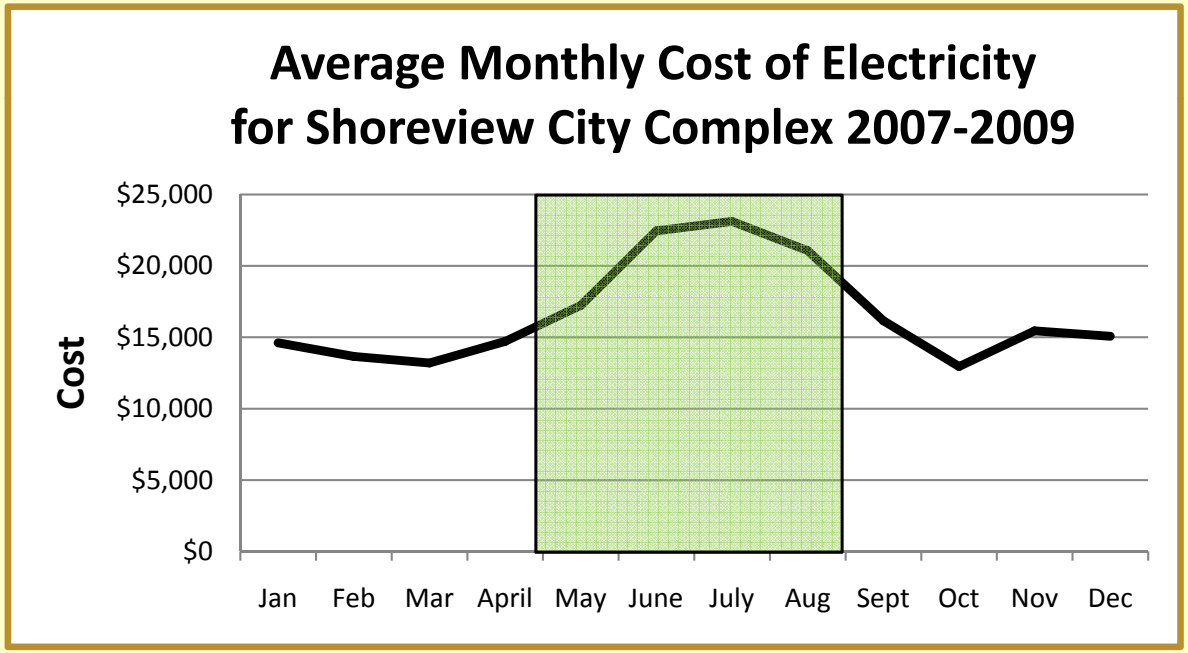




Highest use and cost over three years occurred between May – August

Findings: Energy Efficiency of City Complex

Electric Chiller

- 30 years old
- 30% of building energy use between June – Aug
- ½ as efficient as current models

Recommendations: City Complex

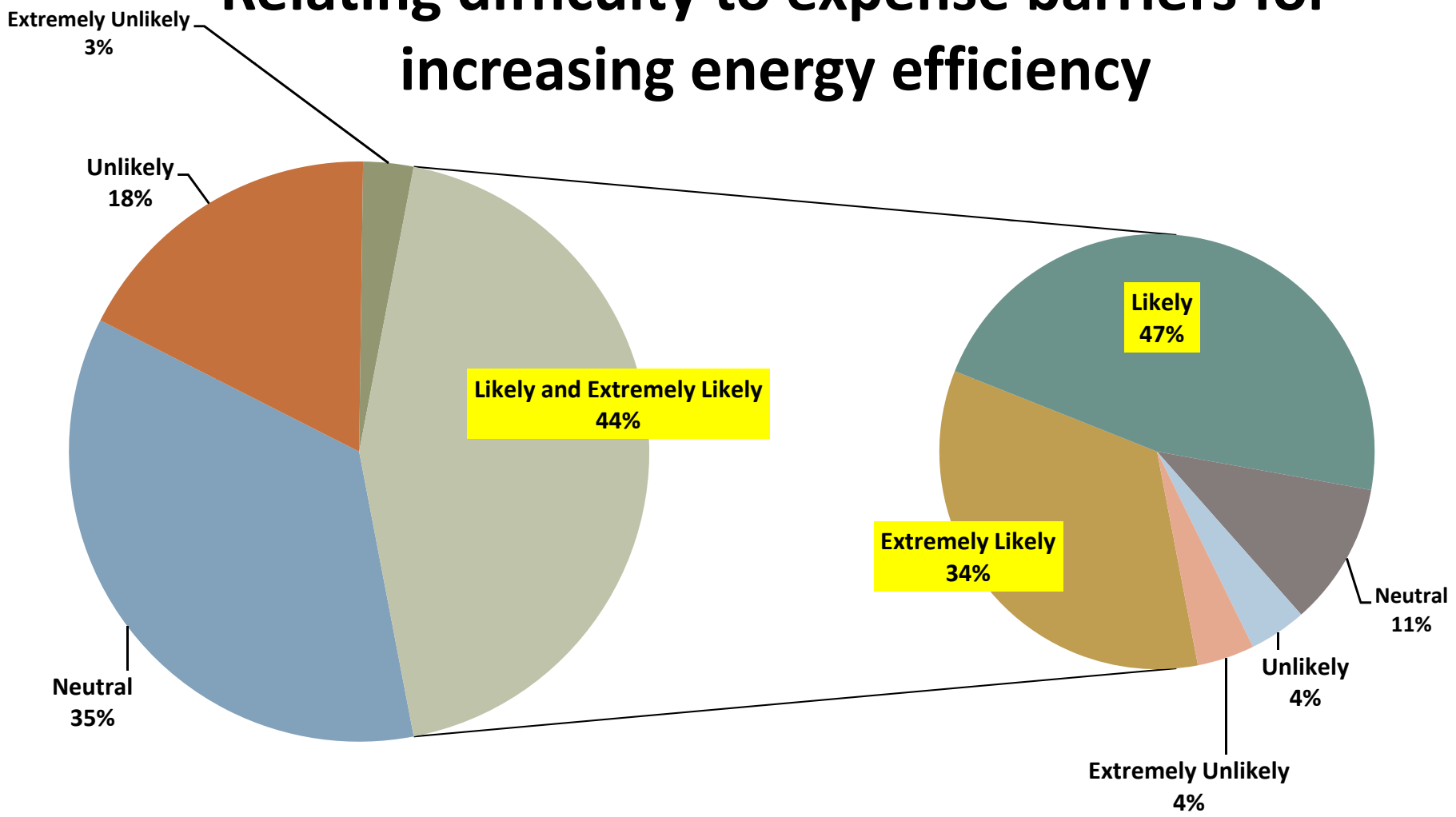
1. Order a formal energy audit of the City Complex

2. Explore options for municipal project financing
   - Guaranteed energy savings contract

3. Upgrade chiller to a model with ≤0.59 kW/ton efficiency

Findings: Resident Perceptions of EE in the Home

Relating difficulty to expense barriers for increasing energy efficiency



Increasing the EE of my home will be DIFFICULT

Increasing the EE of my home will be EXPENSIVE

Findings: Resident Perceptions of EE in the Home

Resident Responses

- Improving energy efficiency would improve the environment
- Feel a strong moral obligation to increase energy efficiency

Recommendations: Resident Perceptions

Reduce perceived barriers through multimedia methods

1. **Distribute EE Pamphlet**
2. **Add to Shoreview Website**

Thank You!