

REGIONAL SUSTAINABLE DEVELOPMENT PARTNERSHIPS**Rural Grocery Store Survey: At-a-Glance****Rural Grocery Energy Use**

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INTRODUCTION

Rural grocery stores are a Main Street anchor business that, once closed, are very difficult to reopen. In our work with communities across Greater Minnesota, the University of Minnesota Extension Regional Sustainable Development Partnerships (RSDP) observed that the needs of rural grocery stores have not been adequately identified and supported. For example, aged infrastructure and refrigeration equipment translates into high energy usage and thus high costs for fruits, vegetables, and dairy products. At the same time, there is increasing interest in healthy food access, one example of which is the recent establishment of the Minnesota Food Charter in 2014.

To correct a lack of information about this sector, RSDP partnered with the Minnesota Center for Survey Research to conduct a statewide survey of Minnesota's rural grocers. In July 2015, a questionnaire was mailed to grocery stores in Minnesota communities with populations less than 2,500. The survey was designed to better understand rural grocers' business conditions, fresh produce availability and challenges, interest in and sales of locally produced products, infrastructure conditions, energy usage, and energy efficiency needs and priorities.

Mailing and data collection took place from July to October 2015. The survey garnered a 69% response rate, with 175 out of 254 eligible grocers completing the survey.

Support for the study was provided by the Minnesota Department of Agriculture, AgCountry Farm Credit Services, AgriBank, AgStar, and United FCS.

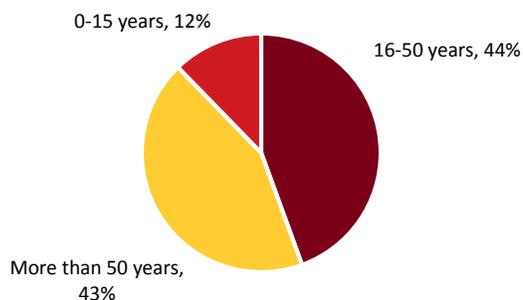
Researchers at Kansas State University provided additional review of the survey instrument.

This is the third in a series of fact sheets sharing "at-a-glance" findings from questions related to what it is like to run a grocery store in rural Minnesota. This fact sheet examines energy usage and related needs in rural grocery stores. Throughout the fact sheet, sample size (N) reflects only those who answered a particular question rather than all 175 survey respondents.

BUILDING

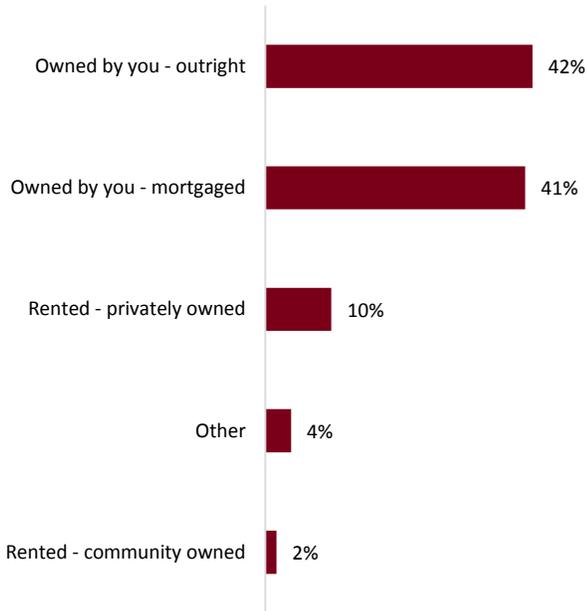
The majority of respondents (87%) said that their grocery stores are located in buildings that are older than 16 years. Many of these (43%) are in buildings that are more than 50 years old.

How old is the building where your grocery store is located? (N=171)



Most respondents (84%) own the building where their grocery store is located, either outright or mortgaged.

Do you own or rent the building where your grocery store is located? (N=172)



EQUIPMENT

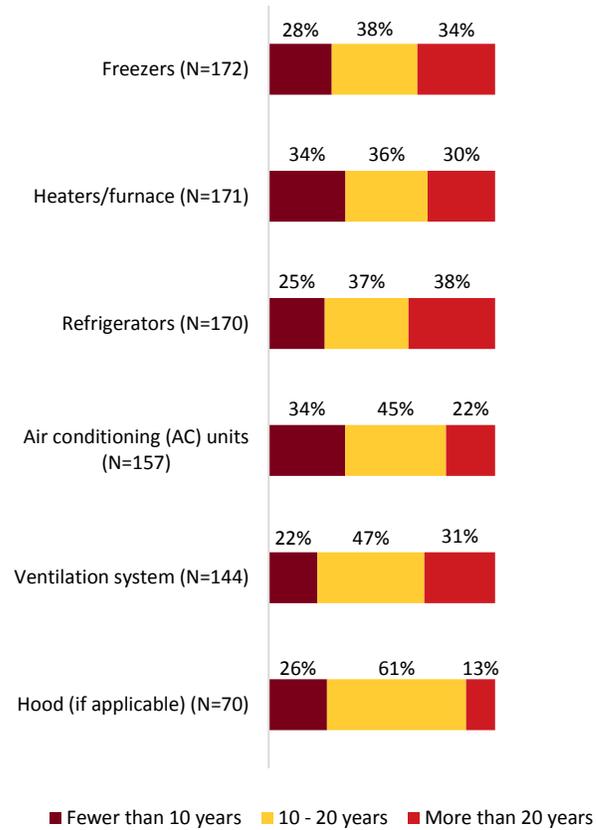
Respondents were asked to comment on their store equipment. Questions focused on equipment age, lighting, and store heating methods.



Freezer upgrade using LED lighting at Bonnie's Hometown Grocery in Clinton, MN. Photo Credit: Clean Energy Resource Teams

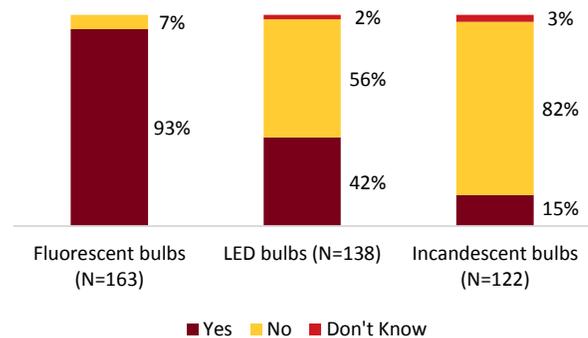
The majority of store equipment was reported to be 10 years or older.

How old is your oldest equipment in each of these categories?



Almost all respondents (93%) said they use fluorescent light bulbs.

What is the source of light in the aisles of the store?



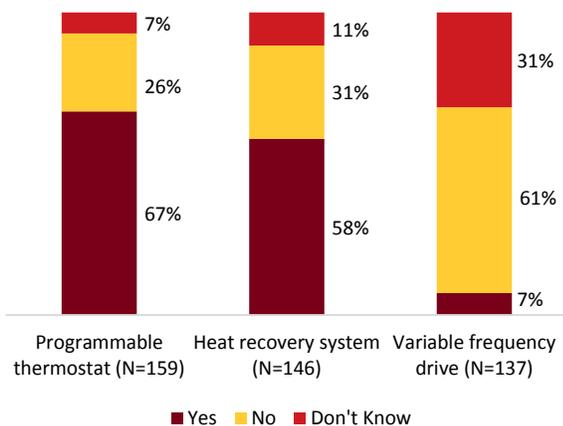
More than half (51%) of respondents said that they heat their store using natural gas.

What type of heating fuel does the grocery store use? (N=174)	
Response	Percent
Natural Gas	51%
Liquid Propane	21%
Other	
Electric	5%
Fuel oil	5%
Heat reclaim	5%
Liquid propane and heat reclaim	3%
Other types of fuel	10%

Note: Categories under “other” were coded based on respondents’ open-ended comments.

More than half of respondents said they use a programmable thermostat (67%) and/or heat recovery system (58%) as part of their store’s heating system.

Which of the following do you have for the grocery store’s heating system?

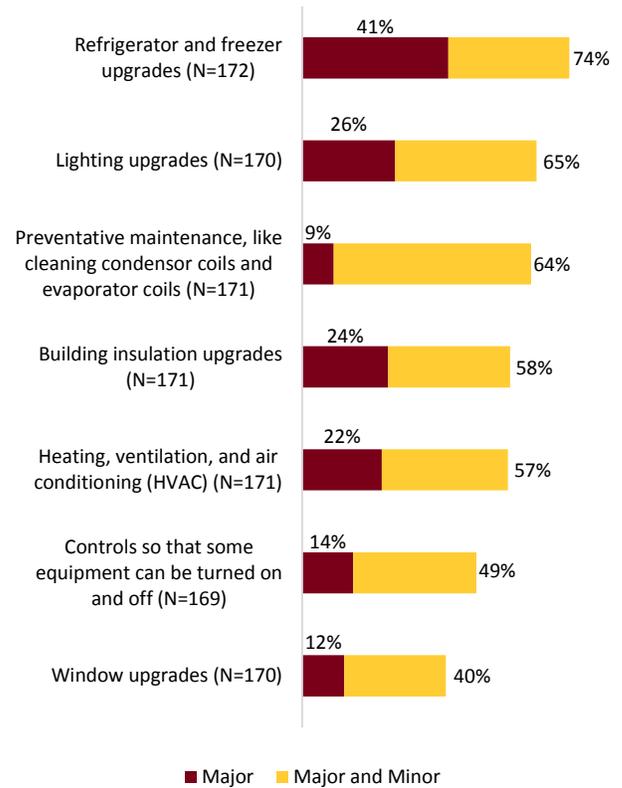


IMPROVEMENTS

Grocers were asked to answer questions about needed repairs to their store and barriers to implementing energy efficiency improvements.

When asked to identify equipment that needed repairs, the highest percentage of respondents said refrigerator and freezer upgrades (74%).

Which of the following repairs are currently needed for the grocery store?



Note: Respondents were also able to list needed repairs not included in the list. Five grocers said roof repairs were needed for their grocery store, one mentioned alerts for temperature changes when the store is closed, and another mentioned prohibitive costs to repairs.

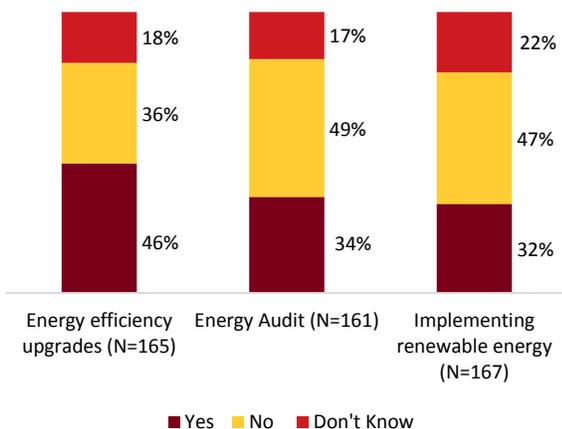


Respondents were then asked to identify the greatest need for their store from the previous list. Half (50%) said that their greatest need was refrigerator and freezer upgrades.

Which repair is the greatest need for your grocery store? (N=147)	
REPAIR	PERCENT
REFRIGERATOR AND FREEZER UPGRADES	50%
LIGHTING UPGRADES	16%
HEATING, VENTILATION, AND AIR CONDITIONING (HVAC)	12%
PREVENTATIVE MAINTENANCE, LIKE CLEANING CONDENSOR COILS AND EVAPORATOR COILS	8%
BUILDING INSULATION UPGRADES	5%
WINDOW UPGRADES	3%
CONTROLS SO THAT SOME OF THE EQUIPMENT CAN BE TURNED ON AND OFF	2%
OTHER	3%

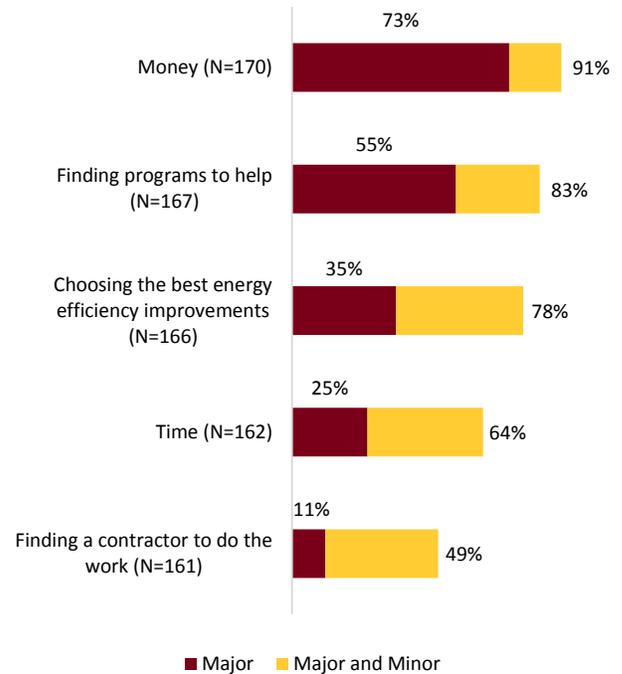
Nearly half (46%) of grocers said that they were interested in energy efficiency upgrades. Around one-third of respondents expressed interest in an energy audit (34%) and implementing renewable energy (32%). The number of respondents who didn't know whether they were interested in energy efficiency upgrades, an energy audit, or implementing renewable energy may indicate a need for more information.

Are you interested in doing any of the following?



Nearly all grocers (91%) said that money was either a major or minor barrier in making their grocery store more energy efficient. Of these, 73% said that it was a major barrier. Eighty-three percent of respondents said that finding programs to help make their store more energy efficient was a barrier.

Which of the following are barriers to making your grocery store more energy efficient?



Data are from the 2015 Minnesota Rural Grocery Survey conducted by the University of Minnesota Extension Regional Sustainable Development Partnerships and the Minnesota Center for Survey Research. For more information, contact Karen Lanthier at 612-624-8452 or korsl001@umn.edu.