Rural Grocery Profit Simulator

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Uses of Rural Grocery Profit Simulator

- This program was created to help evaluate whether a new store could be financially viable in a particular location.

- With some modifications to inputs the program can be used for existing stores. If we have time at the end, we can discuss this in more detail.

- The program can also be used to estimate market size in terms of geography and population.

- In the future we may be able to modify the program and create a version specifically designed for use with existing stores.

- Report any errors to duanej@iastate.edu

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Rural Grocery

Rural Grocery Profit Simulator

This program is designed to give a potential business owner an opportunity to evaluate the financial implications of opening a small grocery store in a specific rural setting. Starting with a review of the potential market area, the program will look at potential revenue, estimated expenses, and ultimately calculate an estimated profit or loss based on the user inputs. A detailed report explaining all of the calculations used will be provided upon completion of the program. Users can "tweak" the inputs used to evaluate the impacts various changes will have on the bottom line.

Rural Grocery Profit Simulator

Rural Grocery Profit Simulator Instructions and Explanations PDF

Calculation: Geographic Market Size

- East = $(8/2)^2$ x pi / 4= 12.57
- West = $(13/2)^2$ x pi /4 = 15.90
- North = $(9/2)^2$ x pi / 4 = 19.63
- South = $(10/2)^2$ x pi / 4 = 33.18

- Total Square Miles = 81.28 or 81.3

Calculation: Market as a Percentage of County

Square Miles of Market = 81.3
Square Miles of County = 400
Market as % of County = 20.3%

Calculation: Rural Population in Market

- Population of County = 20,000
- Less Population of Towns = 7,100
    (4,000 + 1,000 + 500 + 300 + 100 + 1,200)
- Rural Population = 12,900

- Market as % of County = 20.3%
- Multiply by Rural Population = 12,900
- Rural Population in Market = 2,618

Calculation: Total Population of Market

- Rural Population = 2,618
- Population of Town = 1,200
- Other Towns in Market = 600

- Total Population of Market = 4,418

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agmrc.org/business-development/rural-grocery

or search: Rural Grocery Profit Simulator