

## Real Estate Hedonic Pricing Case

Spring 2024

**Text:** If available, see Chapter 9 for topics related to this project from Market Analysis for Real Estate by Rena Mourouzi-Sivitanidou.

### Data:

The accompanying Excel file contains data on townhome units sold near Woodstock, GA. You will use this data to complete this case.

### Your Assignment:

You are analyzing townhome sales in the Woodstock area to estimate the market price of the base model in The Lakes, a townhome subdivision your company is developing. See The Lakes marketing brochure located in the addendum.

**Part 1:** Using the Woodstock, Georgia sales data provided (Excel file), estimate a hedonic price. Be sure to:

- a) Explain the variables you included in your model, why you choose the variables and any transformations made to the variables. (20 points)
- b) Explain what functional form you have assumed. (10 points)
- c) Comment on the explanatory power of the model. (10 points)
- d) Comment on the signs and significance of the model's explanatory variables. (20 points)

**Part 2:** Explain the usefulness of such a model for market analysis purposes and provide examples.

- a) Estimate the price of a base unit with the following features: an interior unit in The Lakes townhome subdivision. See the marketing brochure in the addendum for additional features. (10 points)
- b) Using the base unit, determine the marginal amenity value for an additional full bathroom (vs the half bath), as well as proximity to a Downtown Woodstock. (10 points)
- c) Graph and comment on the price profile of such a unit at different distances from downtown Woodstock. (20 points)

### Base Unit:

The Juliet model: 1,800 square feet, 2 stories, 3 bedrooms, 2 full baths, 1 half bath, 2-car garage. Subdivision amenities include a pool and is located 0.5 miles from downtown Woodstock. HOA dues are \$240 per month.

### Deliverables:

You will produce a written analysis using Word, or a similar word processing software. Be sure to past the results of your hedonic model from Excel. Submit your Excel file so data transformations can be examined, if necessary.

File naming protocol: LASTNAME\_FIRSTNAME\_HEDONIC\_PRICE\_CASE

## ADDENDUM

# *the lakes*

a Townhome Community

The Lakes is a townhome subdivision comprised of 75 luxury townhomes designed with a low-maintenance lifestyle. Homes are built with top-tier craftsmanship and quality materials. Exteriors combine a modern-urban in town feel with timeless appeal. Interiors are bright and open. The HOA maintains all lawn care and landscaping. Outstanding amenities include a clubhouse with fitness center and pool.

Ideally situated on Main Street in downtown Woodstock, Woodstock Main is just a 0.5 mile walk away from shops and restaurants. Named “One of the Top 50 Places to Live in the U.S.” by Money Magazine, Woodstock offers thriving boutiques, restaurants, arts, concerts, festivals, and nightlife. The town’s GreenPrints trail system also connects the whole downtown and is popular with locals for walking and biking throughout the area.



# *the lakes* Features

## **EXTERIOR FEATURES**

Landscaped lawns, maintained by Homeowners' Association  
James Hardie fiber cement siding  
English Bronze exterior features throughout  
Appealing 2-story townhome designs  
Architecturally planned exteriors  
30-Year dimensional roof shingles  
Fully-finished garage  
Garage door with opener and two remotes  
Termite baiting system

## **INTERIOR FEATURES**

Lofty 10 ft. ceilings on main level  
Double pane insulated wood windows with low-e glass. GBG on front elevation with IG sides and rear  
Two panel 8' hardwood interior doors with smooth finish on main level, 6'8" doors on second level  
Sherwin Williams paint for interior walls in your choice of one of seven colors  
Luxury Vinyl Plank (LVP) flooring throughout the main level, laundry, and secondary baths (excluding bedrooms and study)  
Pre-built box stairs with carpet  
Carpeting by Shaw Industries  
7 1/4" baseboard molding on main level; 4 1/4" baseboard molding on second level and garage  
Satin nickel door hardware  
Ventilated shelving in bedroom closets, laundry room and linen closet

## **KITCHEN FEATURES**

Level A & B quartz or granite countertops  
Level 1 tile backsplash  
Whirlpool stainless steel appliance package includes slide-in range, microwave and dishwasher  
Garbage disposal  
Stainless steel under-mount sink with Moen faucet  
42" Shaker style cabinetry in a variety of colors

## **BATH FEATURES**

Owner's bath and secondary baths feature Cera cultured marble countertops and chrome fixtures  
Shaker style cabinetry in a variety of colors  
Quality Moen fixtures in all baths  
Tile flooring in the owner's Bath  
White porcelain pedestal sink in powder room (per plan)

## **LIGHTING FEATURES**

Lighting allowance from Progressive Lighting - choose from a wide array of lighting options to illuminate your home  
Flush mount LED lighting (amount and location vary per plan)  
Pre-wired and braced for ceiling fans in living room & all bedrooms

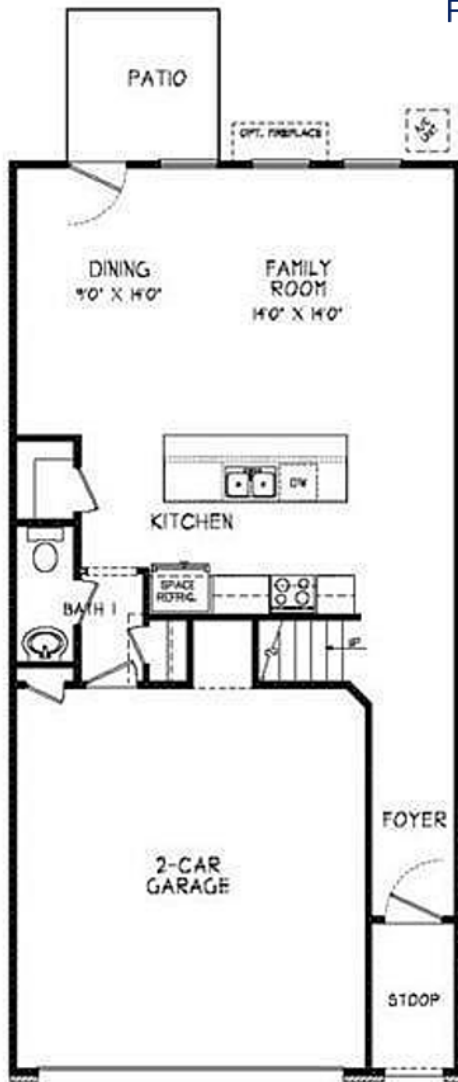
## **OTHER**

14 SEER Honeywell zone control HVAC System with HSPF rating of 8.2 with electric heat pump system by Lennox  
55-gallon electric water heater  
150 AMP electrical service  
R-13 Fiberglass insulation in walls  
R-38 Fiberglass insulation in attic/ceiling  
Wire and trim three media jacks (locations per plan)  
Electric washer and dryer connections  
Wireless Security/Home Automation touchscreen control panel; all exterior doors to be wirelessly contacted; includes 2 wireless glass break detectors  
Minimum of one smoke detector per floor

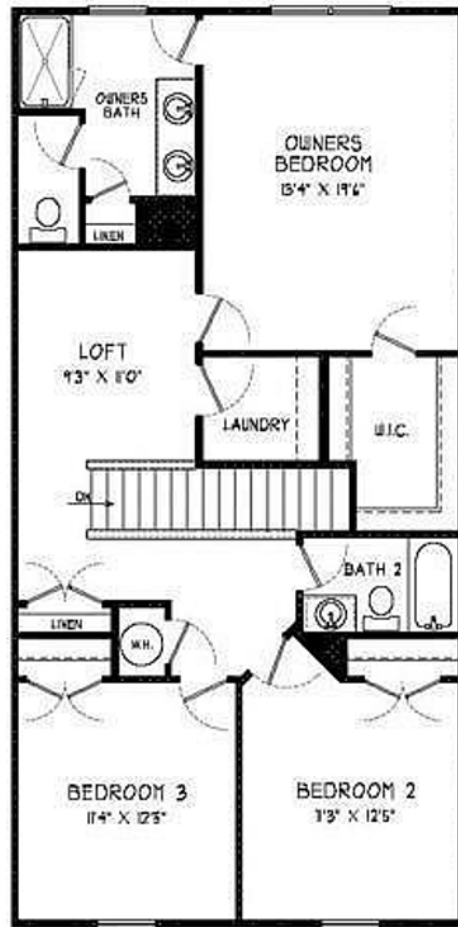
**\$240 per month HOA Fee**

# *the juliet*

## FLOOR PLAN



FIRST FLOOR



SECOND FLOOR

3 bedrooms, 2.5 baths  
1,800 square feet







