

Buy-to-Let Property Viability Calculator

A comprehensive web application for calculating the viability of buy-to-let property investments in the UK, with accurate stamp duty calculations, ROI projections, and cash flow analysis.

Features

- **Property Investment Analysis:** Calculate total investment required including deposit, stamp duty, and fees
- **Stamp Duty Calculator:** Accurate calculations for:
 - England (Stamp Duty Land Tax)
 - Wales (Land Transaction Tax)
 - Different property types: First home, next home, or additional property
- **Monthly Cash Flow:** Detailed breakdown of income vs expenses
- **Annual Returns:** ROI calculation with corporation tax considerations
- **Mortgage Stress Test:** Checks if property meets the 5.5% stress test requirements
- **Airbnb Income Projections:** Based on occupancy rates and nightly prices

Tech Stack

- **Next.js 14:** React framework with App Router
- **TypeScript:** Type-safe development
- **Tailwind CSS:** Utility-first CSS framework
- **Lucide React:** Icon library

Getting Started

Prerequisites

- Node.js 18+ installed
- npm or yarn package manager

Installation

1. Clone the repository:

```
bash
git clone https://github.com/yourusername/btl-property-calculator.git
cd btl-property-calculator
```

2. Install dependencies:

```
bash
npm install
# or
yarn install
```

3. Run the development server:

```
bash
npm run dev
# or
yarn dev
```

4. Open <http://localhost:3000> in your browser

Deployment

Deploy to Vercel

The easiest way to deploy this app is using Vercel:

1. Push your code to GitHub
2. Import your repository in [Vercel](#)
3. Vercel will automatically detect Next.js and configure the build settings
4. Click "Deploy"

[Show Image](#)

Environment Variables

No environment variables are required for this application.

Usage

1. Enter Property Details:

- Purchase price
- Deposit percentage
- Country (England/Wales)
- Property type (First home/Next home/Additional property)
- Renovation and legal costs

2. Configure Mortgage:

- Interest rate
- Mortgage term
- Arrangement fees

3. Set Rental Income Parameters:

- Average price per night (for Airbnb)
- Expected occupancy rate
- Management fees
- Running costs

4. View Results:

- Total initial investment required
- Monthly cash flow breakdown
- Annual profit and ROI
- Mortgage stress test results
- Stamp duty breakdown

Calculations

Stamp Duty Rates (2024/2025)

England - First-time Buyers:

- 0% on first £425,000
- 5% on £425,001 to £625,000
- Standard rates apply above £625,000

England - Main Residence:

- 0% up to £250,000
- 5% on £250,001 to £925,000
- 10% on £925,001 to £1,500,000
- 12% above £1,500,000

England - Additional Properties:

- 3% surcharge on all bands

Wales rates vary with similar structures but different thresholds.

Key Formulas

- **Monthly Income:** $(365 \times \text{Occupancy Rate} / 100) / 12 \times \text{Price per Night}$
- **ROI:** $(\text{Annual Profit} / \text{Total Investment}) \times 100$
- **Stress Test:** Property must generate 125% of mortgage payment at 5.5% interest

Contributing

Pull requests are welcome. For major changes, please open an issue first to discuss what you would like to change.

License

MIT License - see LICENSE file for details

Support

For issues or questions, please open an issue on GitHub.