Appendix 2

FALKIRK COUNCIL HNDA TOOL METHODOLOGY

### **Introduction**

This paper will be used to describe how the Housing Need and Demand Assessment (HNDA) Tool developed by the Scottish Government’s Centre for Housing Market Analysis (CHMA) has been used to assess the total future housing requirement and the split between open market housing and housing that needs subsidy (affordable housing).

For robust and credible status HNDAs must satisfy all core outputs and processes, including core output two: Estimate a RANGE of additional future housing units:

* Broken down into the number of households who are likely to afford owner occupation, private rent, below market rent, social rent.
* Estimates reported for each five year period of a 20 year projection and the cumulative total at the end of the 20 projection.
* The geography chosen should fit with those required for the LHS and Development Plan.
* Assumptions and choices made about scenarios (demographic, existing need, house price, income and affordability) used in the Tool must be based on evidence and clear explained in the HNDA.

This chapter uses the demographic and housing affordability evidence in chapter 2 to estimate the future number of additional housing units required to meet housing need/ demand. This combines an estimate of existing need and future additional households to produce a total additional housing estimate.

The estimate of future additional housing units is purely an arithmetic estimate based mainly on assumptions about future household formation, income, house and rent prices. This does not equate to the future amount of will realistically be delivered on the ground. This is determined in the Housing Supply Target (HST)

In all cases the HNDA must document and explain the assumptions made and should produce a range of scenarios under different assumptions. This chapter should detail the following:

* evidence of choice of future demographic and housing affordability scenarios
* the total future estimate of additional housing units broken down into households likely ability to afford a) owner occupation b) private rent c) below market rent or d) social rent.

N.B. Whilst below market rent does refer to the need for some form of subsidized private rent, it may also be viewed as a potential indicator of demand for alternative shared equity products that are used to support home ownership. As such, the HNDA results may suggest that Authorities should potentially consider further analysis on this.

### **Choice of future demographic scenarios**

The first step when using the Tool is the choice of demographic scenarios to use. The CHMA strongly recommend that NRS household projections are used as these are the official source, are robust and the production of in-house projections is very resource intensive. However, authorities are free to use their own estimates. The HNDA Tool contains the NRS principal and variant projections and has the ability to vary them if required. Local authorities do have a choice when deciding on the households projections to use and they are listed below:

* Using the National Registers of Scotland (NRS) Household Projections (2012 based)
* Creating and Using Falkirk Council’s own Household Projections
* Using the NRS Household Projections and adjusting these

Using in-house projections or amending existing NRS projections is not an option for Falkirk as it is so resource intensive and the resources aren’t available to undertake this level of work.

In a meeting of the Strategic Housing Group (SHG) in August 2021 the use of the principle population projection as well as the high and low variant were discussed. The Group chose to use NRS projections as they are an official source.

The principal projection, is the projection based on the assumptions that the NRS think are most likely to occur. The low and high migration variant population projections use the same assumptions about fertility and mortality as the principal population projection but assume varied levels of migration to and from Scotland.

In 2020, NRS published household projections for every council in Scotland based on 2018 population estimates. The publication included a principle projection as well as high and low projection which were based on alternative assumptions on migration trends.

All three variants suggest an increase in the number of households in Falkirk. The 2018 principal projection suggests that the number of households in Falkirk will increase by 9,523 (13%) between 2018 and 2043. This is on average an increase of 380 households every year. The high migration variant will see a 15% increase and the low variant will see a 12% increase as can be seen in Table 1.

####  **Table 1: Household Projections for Falkirk by Variant**



Source: NRS 2018 Household Projections

Information used in the Key Market Drivers section of the HNDA highlighted that Falkirk has an increasing population and this has been the case since the mid-1990s. Between 1998 and 2020, the population of Falkirk increased by 11.6%. Since 2001, the number of households in Falkirk has increased by 16.4%.

Migration is driving projected increases in population in Falkirk. It is estimated that in Falkirk between 2018 and 2043 there will be 9,986 (26%) more deaths than births in those 25 years. The projected net migration is estimated to be 19,163, with the majority of this coming from migration from the rest of Scotland. When the number of households in the area over the last 10 years between 2011 and 2020 is looked at the number of households has grown by 6%. This growth of 6% over the last 10 years is almost identical to the estimated principle projected household growth for the area between 2018 and 2028 as can be seen in Table 3.

There are a number of factors that could have a negative or a positive impact on migration into the area and these include:

* The impact of Brexit. With the UK leaving the EU, the free movement of persons between the two has also ended. Citizens have lost their right to live and work anywhere in the European Union.
* COVID 19. To reduce the spread, travel restrictions have been introduced which has had an impact on people moving to Scotland. Once the Furlough Scheme ends, the impact on employment will be known
* The Scottish Government announced a £50m growth deal for Falkirk in July 2021. This money will boost the local economy by creating skilled jobs and investing in infrastructure improvements to support sustainable travel, tourism and energy.

The HNDA Tool guidance recommends that a range of estimates are produced therefore the SHG decided in a meeting in August 2021 that the principle population projections would be used as well as the low and high variants.

### **Existing Need**

The HNDA Tool contains a measure of existing need which includes a count of homelessness households in temporary accommodation and households that are both overcrowded and concealed (HoTOC) These households are deemed to be in need of a new unit of housing. The existing need figure for Falkirk in the HNDA Tool is 370 which is the same as the existing need figure for NPF4.

The use of this method of identifying existing need was discussed with the SHG in April 2021. This was in relation to the NPF4 Guidance paper on Minimum All tenure Housing Land Requirement paper which was published in February 2021. This paper set out how the initial default estimate of the minimum all-tenure housing land requirements were arrived at. The first two stages of the estimate use NRS principle household projects and an existing housing need figure.

The existing need estimate figure for both the HNDA and NPF4 is derived using a count of homeless households in temporary accommodation (SG homelessness statistics 2020) and an estimate of households who are both overcrowded and concealed (SG Scottish Household Survey 2016-2018 and Scotland Census 2011).

The SHG noted the default population projections and the housing need estimates. Homes for Scotland raised some issues with the principal of using population projections and with the housing need figure. It was agreed a separate meeting would be held with Homes for Scotland to discuss the NPF4 consultation. It was recommended that the existing need figure was used for NPF4 and the group agreed.

A separate meeting also took place between the Council and Homes for Scotland to discuss the minimum housing land figure. Homes for Scotland raised a general concern with the HNDA model, the use of the population and household projections and the housing need figure. They considered that the housing need figure should also include single person households in need. They did not have any specific objections in the Falkirk Council area although their preferred calculation based on a percentage of a national housing target figure produced a slightly higher figure for the Falkirk Council area.

The use of the existing need figure was also discussed at the SHG meeting in August 2021. At this meeting Homes for Scotland suggested the Council undertake additional primary research to identify existing need in the area and provided a copy of a research report that explains the online method Homes for Scotland have devised for collecting up to date local evidence on existing need.

This research was discussed further at the HNDA Working Group. Undertaking additional primary research work would be resource intensive and would involve using indicators of housing need that haven’t been agreed by the Scottish Government and which doesn’t necessarily mean that a new home is needed e.g. households living in unsuitable properties. It would be more sustainable to repair these properties. Households that are struggling financially will not necessarily be able to afford owner occupation.

Using the HoTOC method is seen as a robust and credible method for identifying existing need and it was agreed that it would be used for NPF4 and would also be used for the HNDA Tool.

The SHG also considered the number of years within which it would be reasonable to clear the backlog need. The default within the tool is set at five years. In the last HNDA the Council had used the ten year timescale to clear existing need and it was decided to use this longer timescale for this HNDA too.

The main reason for choosing the 10 years is due to the number of social rent completions in the last 5 as shown in Table 2. It highlights that on average there were 53.6 completions annually. If the 5 years to clear existing need was chosen 74 properties would need to be built annually to just clear the existing need.

#### **Table 2: Social rent Completions 2015-2020**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 |
| Completions | 86 | 100 | 8 | 49 | 25 |

### **Income Growth and Distribution**

In relation to income, the HNDA Tool is pre-populated with income data obtained from a number of different surveys and produced for the Scottish Government by Herriot-Watt University. Local authorities have the option to use the income data in the Tool or to use their own income data. Accurate income data is difficult to obtain and the Council does not hold any income data such as CACI data. As the income data in the Tool is robust it was decided by the SHG that it should be used.

The Tool is pre-programmed with five income scenarios that are designed to offer the users a range of income growth scenarios for average (median) household income. They are based on the latest economic outlook (2020) and were produced by Scottish Government Economists.

* **Moderate Real Terms Growth (Tool Core/Default)** - Household income growth is assumed to grow at 2.5% per annum in nominal terms. Assuming that inflation is at 2% per annum over the forecast horizon (the Bank of England’s inflation target), then in the long run this scenario assumes that there is real terms income growth of 0.5% per annum.
* **Below Real Terms Growth** - Household income growth is assumed to grow at 0.5% per annum in nominal terms. Assuming that inflation is at 2% per annum over the forecast horizon (the Bank of England’s inflation target), then in the long run this scenario assumes that there is an annual real terms fall in household income of 1.5% per annum.
* **Moderately Below Real Terms Growth** - Household income growth is assumed to grow at 1.5% per annum in nominal terms. Assuming that inflation is at 2% per annum over the forecast horizon (the Bank of England’s inflation target), then in the long run this scenario assumes that there is an annual real terms fall in household income of 0.5% per annum.
* **No Real Terms Growth** - Household income growth is assumed to grow at 2% per annum in nominal terms. Assuming that inflation is at 2% per annum over the forecast horizon (the Bank of England’s inflation target), then in the long run this scenario assumes that there is no real terms growth in household income.
* **High Real Terms Growth** - Household income growth is assumed to grow at 3.5% per annum in nominal terms. Assuming that inflation is at 2% per annum over the forecast horizon (the Bank of England’s inflation target), then in the long run this scenario assumes that there is real terms income growth of 1.5% per annum. This is similar to the level of growth seen in the ten years prior to the 2008 financial crisis.

Information on incomes in the Key Market Drivers chapter shows that median incomes in Falkirk are similar to Scotland as a whole. Over the last 5 years, there have been fluctuations but generally median incomes have increased overall by around 2.2% annually. It was agreed by the SHG that the two scenarios below would be chosen to run through the Tool:

* **Moderate Real Terms Growth (Tool Core/Default)** - Household income growth is assumed to grow at 2.5% per annum in nominal terms.
* **No Real Terms Growth** - Household income growth is assumed to grow at 2% per annum in nominal terms.

The Tool is pre-programmed with 3 income distribution scenarios to reflect different household income distributions. The scenarios are defined in terms of how household income of the 10th, 90th percentile grows relative to median income which is the 50th percentile and are listed below:

* **Great Equality** - The incomes of the least affluent (represented by the 10th percentile of the income distribution) increase more steeply compared to the incomes of most affluent (represented by the 90th percentile of the income distribution).

**No change (Tool core/default)** - The incomes of the least affluent (represented by the 10th percentile of the income distribution) and the most affluent (represented by the

* 90th percentile of the income distribution) increase at the same rate as median household income. The gap in the income distribution between the most and least affluent will not change over time.
* **Greater inequality** - The incomes of the most affluent (represented by the 90th percentile of the income distribution) increase more steadily compared to the incomes of least affluent (represented by the 10th percentile of the income distribution).
* The three scenarios were discussed at the SHG in August 2021 and it was decided that No Change would be run through the Tool. There was discussion about the increase in poverty in the area and whether Greater Inequality should be run through the Tool.
* Unfortunately income data for Falkirk from Nomis is not available for the 90th percentile therefore the 80th , the 10th percentile and median incomes were looked at to see the changes in the last 5 years. The incomes of the 10th percentiles have increased by 3.4% over the last 5 years and the 80th percentile and median incomes by 2.2%. As this shows that there has been a bigger increase in incomes of the 10th percentile than median and the 80th percentile, there wasn’t the evidence to suggest that Greater Inequality should be run through the Tool.

The Tool is set up to analyse affordability (incomes divided by house prices and rent prices) at the 25th percentile of income, house prices and rental prices. The 25th percentile has been chosen because, historically, this is seen to represent where First-Time-Buyers enter this housing market, where housing need and demand is most critical. It was decided by the SHG to keep it at 25% in the Tool as there was no evidence locally that it should be changed.

### **Affordability and House Prices**

### **House Price Choices**

The Tool is pre-programmed with 5 house price scenarios that are designed to offer a range of options and are listed below:

* **Trend Growth (Core/Default)** - House price growth is equivalent to the annualised growth rate of the average Scottish house price (UK HPI) over the last ten years, which is 1.6% per annum.
* **Moderately High** - House price growth is equivalent to the average annualised growth rate in house prices of the 16 local authorities with the highest rates of annualised house price growth over the last 10 years, which is 2.3% per annum.
* **Moderately Low** - House price growth is equivalent to the average annualised growth rate in house prices of the 16 local authorities with the lowest rates of annualised house price growth over the last 10 years, which is 0.7% per annum.
* **High** - House price growth is equivalent to the average annualised growth rate in house prices of the 8 local authorities with the highest rates of annualised house price growth over the last 10 years, which is 2.9% per annum.
* **Low** - House price growth is equivalent to the average annualised growth rate in house prices of the 8 local authorities with the lowest rates of annualised house price growth over the last 10 years, which is 0.3% per annum.

House prices in Falkirk between 2013 and 2017 really fluctuated with some years seeing increases of over 4% and other years less than 1%. Overall there has been an annual increase of 2.5%.

Comparing Falkirk and Scotland average house prices between 2011 and 2020 from Registers of Scotland[[1]](#footnote-1), Falkirk average house prices increased by 27% and Scotland by 21%. The Scottish Fiscal Commission[[2]](#footnote-2) in August 2021 forecast nominal house prices to rise by 3.1 per cent in 2022-23.

The Tool is pre-populated with core/default settings which were chosen to reflect, as far as is possible, the prevailing state of the Scottish housing market and economy when the Tool was refreshed in 2020. As house prices have increased more in Falkirk in the last 10 years compared to Scotland it is was decided that the following scenarios should be used:

* **Trend Growth (Core/Default)** - House price growth is 1.6% per annum.
* **Moderately High** - House price growth is 2.3% per annum.

### **Affordability Rental Prices**

### **The proportion that can Afford to Purchase in the Market**

The first part of this section of the HNDA is used to decide of those who can afford to purchase in the market, what proportion will actually go on to do so. The default in the Tool has been set at 60%. This assumes, of those who can afford mortgage repayments, only 60% also have the deposit to actually go on to buy.

The effect of increasing this percentage would be to increase the amount of housing need that would be met via owner occupation and reduce the amount that be met by the rental sector. Lowering the 60% threshold would have the reverse effect. This was discussed by the SHG and it was decided that the default of 60% would remain as there is no evidence locally that it should be changed.

### **Affordability Thresholds for the Rented Market**

The Tool examines rent affordability by looking at income level in relation to both median and 30th percentile market and social rents. Those with incomes nearer the 30th percentile are more likely to need social rents and those nearer the median to afford private rents, with intermediate rent somewhere in between.

Whilst below market rent does refer to the need for some form of subsidized private rent, it may also be viewed as an potential indicator of demand for alternative shared equity products that are used to support home ownership. As such, the HNDA results may suggest that local authorities should potentially consider further analysis on this.

The default thresholds in the Tool are listed below:

* If a household spends less than 25% of their income on rent the Tool assumes they can afford to rent in the private sector. This threshold has been used historically as the threshold for PRS affordability.
* If a household spends between 25% to 35%1 of their income on rent the Tool assumes they are suitable for below market rent.
* If a household spends more than 35% of their income (including housing benefit) on rent the Tool assumes they are suitable for social rent.

These default thresholds were discussed by the SHG and it was decided that the parameters should remain as there was no local evidence to suggest they should change.

### **Rental Price Change**

The final task for the HMP in setting the inputs and assumptions of the HNDA Tool was to decide how rental prices are likely to change over the course of the projection period. The scenarios are identical to the house price scenarios, with the assumption that over the long run rental prices are likely to track trends in house prices.

Information on private rent prices from the Key Market Drivers section of the HNDA were looked at. In terms of rents for the Forth Valley BRMA, these have seen between 2% and 8% increases annually but in the last 4 years around 4.7% increase annually. When information on private rents for the Falkirk area alone is looked at, some years have seen a 5% increase in rents and other have seen a fall but overall there has been around a 2.9% increase.

It was therefore decided that the same scenarios that were chosen for house prices would be chosen for rental price rises and are listed below:

* **Trend Growth (Core/Default)** - House price growth is equivalent to the annualised growth rate of the average Scottish house price (UK HPI) over the last ten years, which is 1.6% per annum.
* **Moderately High** - House price growth is equivalent to the average annualised growth rate in house prices of the 16 local authorities with the highest rates of annualised house price growth over the last 10 years, which is 2.3% per annum.

### **Scenario Testing**

The tables below summaries the scenarios and assumptions chosen to run through the Tool.

#### **Table 3: Inputs used for the Scenarios run through the HNDA Tool**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Scenario** | **Demographic** | **Income Growth**  | **Income Distribution**  | **House price**  | **Rental price**  |
| Scenario 1 | Principal | Moderate Real Terms Growth (Core Default) | No Change | Moderately High Growth | Moderately High Growth |
| Scenario 2 | Principal | No Real growth | No Change | Trend Growth | Trend Growth |
| Scenario 3 | Low Migration | No Real growth | No Change | Trend growth | Trend Growth |
| Scenario 4 | High Migration | Moderate Real Terms Growth (Core Default) | No Change | Moderately High Growth | Moderately High Growth |

#### **Table 4: Assumptions used in the HNDA Tool**

|  |  |
| --- | --- |
| **Assumption** |  |
| Use NRS Household Projections | Yes |
| Use Income data used in the Tool | Yes |
| Use HoTOC for existing Need | Yes |
| No. of years to clear existing need | 10 |
| Use affordability model | No |
| Default threshold for house prices affordability | 3.9% & 25% |
| Proportion of market who buy | 60% |
| Upper income to rent threshold | 25% |
| Lower income to rent threshold | 35% |

### **Tool Output for all Scenarios**

Table 1 shows the annual average new build requirement for the HNDA timescale of 2022-2026 and Table 2 the annual average new build requirement for the LDP timeframe of 2022-2036. It shows that Scenario 1 and 2 have the same totals as they both use the principle population projection whereas Scenario 3 has the lowest as low migration is used and Scenario 4 the highest as it uses high migration.

The total new build requirement for the HNDA timescale (2022-2026) ranges from 436 units for scenario 2, 466 units for scenario 1 and 2 and 495 units for scenario 4. The new build requirements for the LDP timescale (2022-2036) ranges from 363 units for scenario 3, 408 units for scenario 1 and 2 and 422 units for scenario 4. The differences between the totals for the HNDA timescale and the LDP is due to the annual rate of household growth slowing in future years.

The average new build requirements for all the scenarios in Table 3 are all higher than the average number of new build completions for the last 5 years (2015-2020). The average number of completions in Falkirk over the last 5 years has been 462 units[[3]](#footnote-3). There are of course variations between the 5 years, with 2016-2017 seeing 613 completions and 2019-2020 seeing 376.

### **Scenarios 1 and 2**

Scenarios 1 and 2 use the principle population projection and the total average annual additional units are the same. There are slight differences between the distribution of the different tenure types. For scenario 1, moderately high growth was chosen for house and rent prices and also moderate growth for income whereas trend growth was chosen for house and rent prices in scenario 2 and no real growth for incomes. This has resulted in the Tool allocating a slightly higher number to social rent for scenario 1 and less to buyers.

Scenario 1 is the scenario that we consider is the most likely scenarios due to the total new build requirements being similar to average new build completions over the last five years. When the number of households in the area over the last 10 years between 2011 and 2020 is looked at the number of households has grown by 6%. This growth of 6% over the last 10 years is almost identical to the estimated principle projected household growth for the area between 2018 and 2028 as can be seen in Table 3 where Principle Projection growth in Falkirk is estimated at 6.1%.

Scenario also has a slightly higher number of affordable units which is why it is preferable to Scenario 2.

**Table 5: Household Projections for Falkirk by Variant**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Area** | **2018** | **2028** | **2043** | **Change (%)2018-2028** | **Change (%)2018-2043** |
| Low Migration | 72,267 | 76,470 | 80,685 | 5.8% | 11.6% |
| Principle Projection | 72,267 | 76,692 | 81,790 | 6.1% | 13.2% |
| High Migration | 72,267 | 76,917 | 82,774 | 6.4% | 14.5% |

### **Scenario 3**

Scenario 3 uses the low migration variant which means that the total average annual additional units is slightly lower at 436 than the principle projection of 466. For this scenario no real change was chosen for income growth and no change was chosen for income distribution. In terms of house prices and rental prices, trend growth was chosen for both.

We think that it’s unlikely the area will see lower migration than the principle variant as the migration into the area is predominately from the rest of Scotland and the rest of the UK rather than overseas. This means the issue of the loss of free movement of people between the UK and Europe due to Brexit will have less of an impact on migration in Falkirk.

The economy in Falkirk is relatively buoyant with employment rates generally higher than Scotland as whole which will encourage migration from other parts of Scotland and the UK especially now that Falkirk has £80 million from the growth deal to invest in the local economy.

### **Scenario 4**

Scenario 4 uses the high migration variant which means that the total annual additional units is the highest of the 4 scenarios at 495 units compared to 466 for the principle projection. For this scenario moderate real terms growth was chosen for income growth and no change for income distribution. In terms of house prices and rental prices, moderately high growth was chosen for both.

The migration figures for Falkirk in 2003/04 and 2004/05 had levels of around 1,500 annually. Migration figures over the last 10 years between 201/11 and 2019/20 have averaged around just over 600. There will be investment into the area through the growth deal in future years, this is expected to result in 2,000 jobs which won’t mean a big increase in migration. It’s unlikely that Falkirk will see high migration into the area.

#### **Table 5: HNDA Tool results for average annual new build requirement HNDA 2022-2026**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| HNDA | **Scenario 1** | **Scenario 2** | **Scenario 3** | **Scenario 4** |
| Social Rent | 131 | 131 | 124 | 138 |
| BM Rent | 93 | 92 | 85 | 99 |
| PRS | 80 | 80 | 75 | 85 |
| Buyers | 162 | 163 | 152 | 173 |
| **Total** | **466** | **466** | **436** | **495** |

#### **Scen**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| LDP | **Scenario 1** | **Scenario 2** | **Scenario 3** | **Scenario 4** |
| Social Rent | 108 | 105 | 96 | 111 |
| BM Rent | 83 | 83 | 73 | 86 |
| PRS | 72 | 73 | 64 | 74 |
| Buyers | 146 | 148 | 130 | 151 |
| **Total** | **408** | **408** | **363** | **422** |

The following tables show the number of additional units required annually by tenure for all 4 scenarios and all six housing sub market areas. These tables include the results for all the years in the HNDA Tool from 2022 - 2041.

#### **Scenario 1 All Areas**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Year | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 20 yr total | 20 yr pa |
| SR | 143 | 135 | 136 | 128 | 115 | 119 | 111 | 118 | 120 | 115 | 75 | 77 | 75 | 76 | 72 | 70 | 70 | 66 | 61 | 66 | 1946 | 97 |
| BMR | 106 | 98 | 99 | 87 | 74 | 78 | 71 | 77 | 79 | 82 | 79 | 81 | 78 | 79 | 75 | 73 | 70 | 66 | 61 | 66 | 1579 | 79 |
| PRS | 88 | 81 | 82 | 79 | 68 | 72 | 65 | 68 | 70 | 69 | 67 | 68 | 66 | 67 | 63 | 62 | 66 | 61 | 57 | 59 | 1378 | 69 |
| Buyers | 182 | 169 | 170 | 156 | 133 | 141 | 127 | 141 | 145 | 143 | 137 | 141 | 136 | 139 | 131 | 127 | 129 | 120 | 112 | 122 | 2801 | 140 |
| Total | 519 | 484 | 486 | 449 | 390 | 410 | 374 | 403 | 414 | 409 | 358 | 367 | 355 | 361 | 341 | 331 | 335 | 313 | 291 | 313 | 7703 | 385 |

#### **Scenario 1 Polmont and Rural South**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Year | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 20 yr total | 20 yr pa |
| SR | 21 | 20 | 20 | 19 | 17 | 17 | 16 | 17 | 17 | 17 | 10 | 10 | 10 | 10 | 9 | 9 | 9 | 9 | 8 | 9 | 275 | 14 |
| BMR | 18 | 16 | 16 | 15 | 13 | 14 | 13 | 14 | 14 | 14 | 13 | 13 | 13 | 13 | 12 | 12 | 12 | 11 | 11 | 11 | 271 | 14 |
| PRS | 25 | 23 | 23 | 22 | 18 | 20 | 18 | 19 | 19 | 20 | 19 | 19 | 19 | 19 | 18 | 18 | 18 | 16 | 15 | 16 | 384 | 19 |
| Buyers | 31 | 29 | 29 | 27 | 23 | 24 | 22 | 24 | 25 | 24 | 24 | 24 | 23 | 24 | 22 | 22 | 22 | 21 | 19 | 21 | 481 | 24 |
| Total | 95 | 89 | 89 | 82 | 72 | 75 | 69 | 74 | 76 | 75 | 65 | 67 | 65 | 66 | 62 | 61 | 61 | 57 | 53 | 57 | 1411 | 71 |

#### **Scenario 1 Falkirk**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Year | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 20 yr total | 20 yr pa |
| SR | 45 | 43 | 43 | 40 | 36 | 35 | 33 | 35 | 36 | 35 | 24 | 25 | 24 | 25 | 23 | 22 | 23 | 21 | 20 | 21 | 609 | 30 |
| BMR | 29 | 27 | 27 | 25 | 21 | 24 | 22 | 24 | 25 | 23 | 22 | 23 | 22 | 23 | 21 | 21 | 21 | 20 | 18 | 20 | 458 | 23 |
| PRS | 6 | 5 | 5 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 4 | 4 | 4 | 4 | 4 | 3 | 86 | 4 |
| Buyers | 56 | 53 | 53 | 48 | 41 | 44 | 40 | 43 | 44 | 44 | 42 | 43 | 42 | 42 | 40 | 39 | 39 | 37 | 34 | 38 | 862 | 43 |
| Total | 136 | 127 | 127 | 118 | 102 | 107 | 98 | 106 | 108 | 107 | 94 | 96 | 93 | 94 | 89 | 86 | 87 | 82 | 76 | 82 | 2015 | 101 |

#### **Scenario 1 Denny and Bonnybridge**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Year | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 20 yr total | 20 yr pa |
| SR | 23 | 22 | 22 | 20 | 18 | 18 | 17 | 18 | 18 | 18 | 11 | 12 | 11 | 11 | 11 | 10 | 11 | 10 | 9 | 10 | 297 | 15 |
| BMR | 16 | 15 | 15 | 14 | 12 | 14 | 12 | 13 | 14 | 13 | 12 | 13 | 12 | 13 | 12 | 11 | 12 | 11 | 10 | 11 | 254 | 13 |
| PRS | 25 | 23 | 23 | 21 | 18 | 19 | 17 | 19 | 19 | 20 | 19 | 19 | 19 | 19 | 18 | 17 | 17 | 16 | 15 | 16 | 381 | 19 |
| Buyers | 22 | 20 | 20 | 19 | 16 | 17 | 15 | 17 | 18 | 17 | 17 | 17 | 17 | 17 | 16 | 16 | 16 | 15 | 14 | 15 | 341 | 17 |
| Total | 86 | 80 | 80 | 74 | 64 | 68 | 62 | 67 | 68 | 68 | 59 | 61 | 59 | 60 | 56 | 55 | 55 | 52 | 48 | 52 | 1273 | 64 |

#### **Scenario 1 Bo’ness**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Year | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 20 yr total | 20 yr pa |
| SR | 17 | 16 | 16 | 15 | 13 | 14 | 13 | 13 | 14 | 14 | 9 | 9 | 9 | 9 | 9 | 8 | 9 | 8 | 7 | 8 | 230 | 12 |
| BMR | 10 | 9 | 9 | 9 | 7 | 8 | 7 | 8 | 8 | 8 | 7 | 8 | 7 | 7 | 7 | 7 | 7 | 6 | 6 | 6 | 153 | 8 |
| PRS | 6 | 6 | 6 | 5 | 5 | 5 | 4 | 4 | 4 | 5 | 5 | 5 | 4 | 5 | 4 | 4 | 4 | 4 | 4 | 4 | 92 | 5 |
| Buyers | 19 | 17 | 17 | 16 | 14 | 14 | 13 | 15 | 15 | 15 | 14 | 15 | 14 | 14 | 14 | 13 | 13 | 12 | 12 | 12 | 288 | 14 |
| Total | 52 | 48 | 48 | 45 | 39 | 41 | 37 | 40 | 41 | 41 | 35 | 36 | 35 | 36 | 34 | 33 | 33 | 31 | 29 | 31 | 764 | 38 |

#### **Scenario 1 Grangemouth**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Year | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 20 yr total | 20 yr pa |
| SR | 23 | 22 | 22 | 21 | 18 | 18 | 17 | 18 | 18 | 18 | 14 | 14 | 13 | 14 | 13 | 13 | 13 | 12 | 11 | 12 | 322 | 16 |
| BMR | 14 | 13 | 13 | 12 | 10 | 11 | 10 | 11 | 12 | 11 | 11 | 11 | 10 | 11 | 10 | 10 | 10 | 9 | 9 | 9 | 216 | 11 |
| PRS | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 11 | 1 |
| Buyers | 23 | 22 | 22 | 20 | 17 | 18 | 16 | 18 | 18 | 18 | 18 | 18 | 17 | 18 | 17 | 16 | 16 | 15 | 14 | 15 | 358 | 18 |
| Total | 61 | 57 | 57 | 53 | 46 | 48 | 44 | 47 | 49 | 48 | 42 | 43 | 42 | 43 | 40 | 39 | 40 | 37 | 34 | 37 | 906 | 45 |

#### **Scenario 1 Stenhousemuir, Larbert and Rural North**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Year | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 20 yr total | 20 yr pa |
| SR | 20 | 19 | 19 | 18 | 16 | 16 | 15 | 16 | 16 | 16 | 10 | 10 | 10 | 10 | 9 | 9 | 9 | 9 | 8 | 9 | 268 | 13 |
| BMR | 16 | 15 | 15 | 14 | 12 | 13 | 12 | 13 | 13 | 12 | 12 | 12 | 12 | 12 | 11 | 11 | 11 | 10 | 10 | 10 | 245 | 12 |
| PRS | 23 | 21 | 21 | 20 | 17 | 18 | 16 | 17 | 18 | 18 | 17 | 18 | 17 | 17 | 16 | 16 | 16 | 15 | 14 | 15 | 349 | 17 |
| Buyers | 31 | 28 | 29 | 26 | 22 | 24 | 22 | 24 | 24 | 24 | 23 | 24 | 23 | 23 | 22 | 21 | 22 | 21 | 19 | 21 | 473 | 24 |
| Total | 90 | 84 | 84 | 78 | 67 | 71 | 65 | 70 | 71 | 71 | 62 | 64 | 62 | 63 | 59 | 58 | 58 | 54 | 51 | 54 | 1334 | 67 |

### **Scenario 2 All Scenarios**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Year | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 20 yr total | 20 yr pa |
| SR | 143 | 135 | 136 | 128 | 111 | 115 | 108 | 114 | 116 | 115 | 72 | 73 | 71 | 72 | 68 | 66 | 64 | 59 | 55 | 59 | 1882 | 94 |
| BMR | 106 | 94 | 94 | 87 | 78 | 82 | 74 | 81 | 79 | 78 | 79 | 81 | 78 | 79 | 72 | 70 | 74 | 69 | 61 | 66 | 1580 | 79 |
| PRS | 88 | 86 | 86 | 77 | 66 | 69 | 63 | 68 | 74 | 71 | 68 | 70 | 67 | 69 | 68 | 64 | 65 | 61 | 59 | 62 | 1400 | 70 |
| Buyers | 182 | 169 | 170 | 158 | 136 | 143 | 129 | 141 | 145 | 145 | 140 | 143 | 138 | 141 | 133 | 131 | 133 | 124 | 115 | 126 | 2841 | 142 |
| Total | 519 | 484 | 486 | 449 | 390 | 410 | 374 | 403 | 414 | 409 | 358 | 367 | 355 | 361 | 341 | 331 | 335 | 313 | 291 | 313 | 7703 | 385 |

#### **Scenario 2 Polmont and Rural South**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Year | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 20 yr total | 20 yr pa |
| SR | 21 | 20 | 19 | 18 | 17 | 17 | 16 | 17 | 17 | 17 | 10 | 9 | 9 | 9 | 9 | 8 | 9 | 8 | 7 | 8 | 267 | 13 |
| BMR | 18 | 16 | 17 | 16 | 13 | 14 | 12 | 13 | 14 | 14 | 12 | 13 | 13 | 13 | 12 | 11 | 12 | 11 | 10 | 11 | 266 | 13 |
| PRS | 25 | 23 | 23 | 21 | 19 | 20 | 18 | 19 | 20 | 19 | 19 | 20 | 19 | 19 | 18 | 18 | 18 | 17 | 16 | 17 | 388 | 19 |
| Buyers | 31 | 29 | 29 | 27 | 23 | 25 | 22 | 24 | 25 | 25 | 24 | 25 | 24 | 25 | 23 | 23 | 23 | 21 | 20 | 22 | 489 | 24 |
| Total | 95 | 89 | 89 | 82 | 72 | 75 | 69 | 74 | 76 | 75 | 65 | 67 | 65 | 66 | 62 | 61 | 61 | 57 | 53 | 57 | 1411 | 71 |

#### **Scenario 2 Falkirk**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Year | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 20 yr total | 20 yr pa |
| SR | 45 | 43 | 40 | 38 | 34 | 35 | 33 | 35 | 36 | 35 | 24 | 24 | 23 | 24 | 22 | 22 | 22 | 20 | 19 | 20 | 595 | 30 |
| BMR | 29 | 27 | 29 | 27 | 22 | 23 | 21 | 23 | 24 | 23 | 22 | 23 | 22 | 23 | 21 | 20 | 20 | 19 | 17 | 19 | 454 | 23 |
| PRS | 5 | 5 | 5 | 4 | 5 | 5 | 4 | 5 | 5 | 4 | 4 | 5 | 4 | 5 | 4 | 5 | 5 | 5 | 4 | 4 | 91 | 5 |
| Buyers | 57 | 53 | 53 | 48 | 41 | 44 | 40 | 43 | 44 | 45 | 43 | 44 | 43 | 44 | 41 | 40 | 40 | 38 | 36 | 38 | 875 | 44 |
| Total | 136 | 127 | 127 | 118 | 102 | 107 | 98 | 106 | 108 | 107 | 94 | 96 | 93 | 94 | 89 | 86 | 87 | 82 | 76 | 82 | 2015 | 101 |

#### **Scenario 2 Denny and Bonnybridge**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Year | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 20 yr total | 20 yr pa |
| SR | 23 | 22 | 20 | 19 | 17 | 18 | 17 | 18 | 18 | 18 | 11 | 11 | 11 | 11 | 10 | 10 | 10 | 9 | 9 | 9 | 289 | 14 |
| BMR | 16 | 15 | 16 | 15 | 12 | 13 | 12 | 13 | 13 | 13 | 12 | 13 | 12 | 13 | 12 | 11 | 11 | 10 | 10 | 10 | 251 | 13 |
| PRS | 25 | 23 | 23 | 21 | 19 | 20 | 18 | 19 | 19 | 19 | 19 | 20 | 19 | 19 | 18 | 18 | 18 | 17 | 16 | 17 | 387 | 19 |
| Buyers | 22 | 20 | 20 | 19 | 16 | 17 | 16 | 17 | 18 | 18 | 17 | 17 | 17 | 17 | 16 | 16 | 16 | 15 | 14 | 15 | 346 | 17 |
| Total | 86 | 80 | 80 | 74 | 64 | 68 | 62 | 67 | 68 | 68 | 59 | 61 | 59 | 60 | 56 | 55 | 55 | 52 | 48 | 52 | 1273 | 64 |

#### **Scenario 2 Bo’ness**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Year | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 20 yr total | 20 yr pa |
| SR | 17 | 16 | 16 | 15 | 13 | 14 | 13 | 13 | 14 | 14 | 9 | 9 | 8 | 9 | 8 | 8 | 8 | 7 | 7 | 7 | 223 | 11 |
| BMR | 10 | 9 | 10 | 9 | 7 | 8 | 7 | 8 | 8 | 8 | 7 | 8 | 8 | 8 | 7 | 7 | 7 | 6 | 6 | 6 | 152 | 8 |
| PRS | 6 | 6 | 6 | 5 | 4 | 5 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 4 | 5 | 5 | 5 | 4 | 5 | 97 | 5 |
| Buyers | 19 | 17 | 17 | 16 | 14 | 15 | 13 | 15 | 15 | 15 | 14 | 15 | 14 | 15 | 14 | 13 | 13 | 13 | 12 | 13 | 292 | 15 |
| Total | 52 | 48 | 48 | 45 | 39 | 41 | 37 | 40 | 41 | 41 | 35 | 36 | 35 | 36 | 34 | 33 | 33 | 31 | 29 | 31 | 764 | 38 |

#### **Scenario 2 Grangemouth**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Year | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 20 yr total | 20 yr pa |
| SR | 23 | 22 | 21 | 20 | 17 | 18 | 17 | 18 | 18 | 18 | 14 | 13 | 13 | 13 | 12 | 12 | 12 | 11 | 11 | 11 | 316 | 16 |
| BMR | 14 | 13 | 14 | 13 | 10 | 11 | 10 | 11 | 11 | 11 | 10 | 11 | 10 | 11 | 10 | 9 | 9 | 9 | 8 | 9 | 214 | 11 |
| PRS | 1 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 13 | 1 |
| Buyers | 23 | 22 | 22 | 20 | 17 | 18 | 16 | 18 | 18 | 18 | 18 | 18 | 18 | 18 | 17 | 17 | 17 | 16 | 15 | 16 | 363 | 18 |
| Total | 61 | 57 | 57 | 53 | 46 | 48 | 44 | 47 | 49 | 48 | 42 | 43 | 42 | 43 | 40 | 39 | 40 | 37 | 34 | 37 | 906 | 45 |

#### **Scenario 2 Stenhousemuir, Larbert and Rural North**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Year | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 20 yr total | 20 yr pa |
| SR | 20 | 19 | 18 | 17 | 16 | 16 | 15 | 16 | 16 | 16 | 10 | 10 | 9 | 9 | 9 | 9 | 9 | 8 | 8 | 8 | 260 | 13 |
| BMR | 16 | 15 | 16 | 14 | 12 | 12 | 11 | 12 | 12 | 12 | 11 | 12 | 12 | 12 | 11 | 10 | 10 | 10 | 9 | 10 | 240 | 12 |
| PRS | 23 | 21 | 21 | 19 | 17 | 18 | 16 | 18 | 18 | 18 | 18 | 18 | 17 | 17 | 16 | 16 | 17 | 16 | 14 | 15 | 354 | 18 |
| Buyers | 31 | 28 | 29 | 27 | 23 | 24 | 22 | 24 | 25 | 24 | 24 | 24 | 23 | 24 | 23 | 22 | 22 | 21 | 20 | 21 | 480 | 24 |
| Total | 90 | 84 | 84 | 78 | 67 | 71 | 65 | 70 | 71 | 71 | 62 | 64 | 62 | 63 | 59 | 58 | 58 | 54 | 51 | 54 | 1334 | 67 |

#### **Scenario 3 All Scenarios**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Year | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 20 yr total | 20 yr pa |
| SR | 138 | 131 | 129 | 120 | 103 | 107 | 98 | 103 | 105 | 105 | 61 | 62 | 59 | 60 | 55 | 53 | 52 | 48 | 44 | 46 | 1681 | 84 |
| BMR | 101 | 90 | 87 | 79 | 69 | 73 | 64 | 69 | 68 | 68 | 67 | 68 | 65 | 66 | 58 | 56 | 61 | 56 | 48 | 51 | 1366 | 68 |
| PRS | 84 | 82 | 80 | 70 | 59 | 62 | 54 | 59 | 64 | 61 | 58 | 59 | 56 | 57 | 55 | 52 | 54 | 49 | 47 | 48 | 1209 | 60 |
| Buyers | 174 | 162 | 157 | 145 | 121 | 128 | 112 | 121 | 125 | 126 | 119 | 120 | 115 | 118 | 107 | 105 | 109 | 101 | 91 | 98 | 2454 | 123 |
| Total | 496 | 465 | 453 | 415 | 352 | 371 | 329 | 352 | 362 | 359 | 306 | 308 | 296 | 302 | 274 | 266 | 276 | 254 | 230 | 244 | 6710 | 336 |

#### **Scenario 3 Polmont and Rural South**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Year | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 20 yr total | 20 yr pa |
| SR | 20 | 20 | 18 | 17 | 16 | 16 | 15 | 16 | 16 | 16 | 8 | 8 | 8 | 8 | 7 | 7 | 7 | 7 | 6 | 6 | 241 | 12 |
| BMR | 17 | 16 | 16 | 15 | 12 | 12 | 11 | 12 | 12 | 12 | 11 | 11 | 11 | 11 | 10 | 9 | 10 | 9 | 8 | 8 | 230 | 12 |
| PRS | 24 | 22 | 22 | 19 | 17 | 18 | 15 | 17 | 17 | 17 | 16 | 17 | 16 | 16 | 14 | 14 | 15 | 14 | 12 | 13 | 336 | 17 |
| Buyers | 30 | 28 | 27 | 25 | 21 | 22 | 19 | 21 | 22 | 22 | 20 | 21 | 20 | 21 | 19 | 18 | 19 | 17 | 16 | 17 | 422 | 21 |
| Total | 91 | 85 | 83 | 76 | 65 | 68 | 60 | 65 | 66 | 66 | 56 | 56 | 54 | 55 | 50 | 49 | 50 | 46 | 42 | 45 | 1229 | 61 |

#### **Scenario 3 Falkirk**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Year | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 20 yr total | 20 yr pa |
| SR | 44 | 41 | 38 | 36 | 31 | 33 | 30 | 31 | 32 | 32 | 21 | 20 | 19 | 20 | 18 | 17 | 18 | 17 | 15 | 16 | 529 | 26 |
| BMR | 28 | 26 | 27 | 25 | 20 | 21 | 18 | 20 | 20 | 20 | 18 | 19 | 19 | 19 | 17 | 16 | 17 | 15 | 14 | 15 | 393 | 20 |
| PRS | 5 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 3 | 4 | 4 | 4 | 4 | 3 | 4 | 4 | 4 | 3 | 3 | 79 | 4 |
| Buyers | 54 | 50 | 49 | 44 | 37 | 39 | 34 | 37 | 38 | 39 | 37 | 37 | 36 | 36 | 33 | 32 | 33 | 31 | 28 | 30 | 756 | 38 |
| Total | 130 | 122 | 119 | 109 | 92 | 97 | 86 | 92 | 95 | 94 | 80 | 80 | 77 | 79 | 72 | 69 | 72 | 66 | 60 | 64 | 1756 | 88 |

#### **Scenario 3 Denny and Bonnybridge**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Year | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 20 yr total | 20 yr pa |
| SR | 22 | 21 | 19 | 18 | 16 | 16 | 15 | 16 | 16 | 16 | 10 | 9 | 9 | 9 | 8 | 8 | 8 | 8 | 7 | 7 | 258 | 13 |
| BMR | 15 | 14 | 15 | 14 | 11 | 12 | 10 | 11 | 11 | 11 | 10 | 11 | 10 | 10 | 10 | 9 | 9 | 8 | 8 | 8 | 217 | 11 |
| PRS | 24 | 22 | 22 | 19 | 17 | 18 | 15 | 16 | 17 | 17 | 16 | 16 | 16 | 16 | 15 | 15 | 15 | 14 | 12 | 13 | 334 | 17 |
| Buyers | 21 | 20 | 19 | 18 | 15 | 16 | 14 | 15 | 15 | 15 | 15 | 15 | 14 | 14 | 13 | 13 | 13 | 12 | 11 | 12 | 299 | 15 |
| Total | 82 | 77 | 75 | 69 | 58 | 61 | 54 | 58 | 60 | 59 | 51 | 51 | 49 | 50 | 45 | 44 | 46 | 42 | 38 | 40 | 1108 | 55 |

#### **Scenario 3 Bo’ness**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Year |  | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 20 yr total | 20 yr pa |
| SR |  | 16 | 15 | 15 | 14 | 12 | 13 | 11 | 12 | 12 | 12 | 8 | 7 | 7 | 7 | 6 | 6 | 7 | 6 | 5 | 6 | 199 | 10 |
| BMR |  | 10 | 9 | 9 | 8 | 7 | 7 | 6 | 7 | 7 | 7 | 6 | 7 | 6 | 7 | 6 | 5 | 5 | 5 | 5 | 5 | 132 | 7 |
| PRS |  | 6 | 5 | 5 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 3 | 4 | 83 | 4 |
| Buyers |  | 18 | 16 | 16 | 15 | 13 | 13 | 12 | 13 | 13 | 13 | 12 | 12 | 12 | 12 | 11 | 11 | 11 | 10 | 9 | 10 | 252 | 13 |
| Total |  | 49 | 46 | 45 | 41 | 35 | 37 | 33 | 35 | 36 | 36 | 30 | 30 | 29 | 30 | 27 | 26 | 27 | 25 | 23 | 24 | 666 | 33 |

#### **Scenario 3 Grangemouth**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Year | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 20 yr total | 20 yr pa |
| SR | 22 | 21 | 20 | 18 | 16 | 17 | 15 | 16 | 16 | 16 | 12 | 11 | 11 | 11 | 10 | 10 | 10 | 9 | 8 | 9 | 279 | 14 |
| BMR | 13 | 12 | 13 | 12 | 9 | 10 | 9 | 9 | 10 | 10 | 9 | 9 | 9 | 9 | 8 | 8 | 8 | 7 | 7 | 7 | 185 | 9 |
| PRS | 1 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 11 | 1 |
| Buyers | 22 | 21 | 20 | 18 | 15 | 16 | 14 | 15 | 16 | 16 | 15 | 16 | 15 | 15 | 14 | 13 | 14 | 13 | 12 | 12 | 314 | 16 |
| Total | 58 | 55 | 53 | 49 | 41 | 43 | 39 | 41 | 42 | 42 | 36 | 36 | 35 | 36 | 32 | 31 | 33 | 30 | 27 | 29 | 789 | 39 |

#### **Scenario 3 Stenhousemuir, Larbert and Rural North**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Year | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 20 yr total | 20 yr pa |
| SR | 20 | 19 | 18 | 17 | 15 | 15 | 14 | 15 | 15 | 15 | 9 | 8 | 8 | 8 | 7 | 7 | 7 | 7 | 6 | 6 | 234 | 12 |
| BMR | 15 | 14 | 14 | 13 | 10 | 11 | 10 | 10 | 11 | 11 | 10 | 10 | 10 | 10 | 9 | 8 | 9 | 8 | 7 | 8 | 208 | 10 |
| PRS | 22 | 20 | 20 | 18 | 15 | 16 | 14 | 15 | 15 | 15 | 15 | 15 | 15 | 14 | 13 | 13 | 14 | 13 | 11 | 12 | 306 | 15 |
| Buyers | 29 | 27 | 26 | 24 | 20 | 22 | 19 | 20 | 21 | 21 | 20 | 20 | 19 | 20 | 18 | 18 | 18 | 17 | 16 | 17 | 414 | 21 |
| Total | 86 | 80 | 78 | 72 | 61 | 64 | 57 | 61 | 62 | 62 | 53 | 54 | 51 | 52 | 48 | 46 | 48 | 44 | 40 | 42 | 1161 | 58 |

## **Scenario 4 All Areas**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Year | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 20 yr total | 20 yr pa |
| SR | 149 | 140 | 143 | 134 | 122 | 128 | 120 | 127 | 131 | 125 | 85 | 87 | 85 | 86 | 82 | 81 | 81 | 78 | 74 | 77 | 2135 | 107 |
| BMR | 112 | 103 | 106 | 93 | 81 | 87 | 80 | 86 | 89 | 92 | 89 | 91 | 89 | 90 | 86 | 85 | 81 | 78 | 74 | 77 | 1768 | 88 |
| PRS | 93 | 85 | 88 | 85 | 74 | 79 | 73 | 76 | 79 | 78 | 76 | 77 | 75 | 76 | 73 | 72 | 76 | 73 | 69 | 70 | 1545 | 77 |
| Buyers | 192 | 177 | 182 | 167 | 146 | 156 | 143 | 157 | 163 | 160 | 156 | 159 | 156 | 157 | 150 | 148 | 149 | 143 | 134 | 143 | 3139 | 157 |

#### **Scenario 4 Polmont and Rural South**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Year | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 20 yr total | 20 yr pa |
| SR | 22 | 21 | 21 | 20 | 18 | 18 | 17 | 18 | 19 | 18 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 10 | 10 | 10 | 300 | 15 |
| BMR | 19 | 17 | 18 | 16 | 14 | 16 | 15 | 16 | 16 | 15 | 15 | 15 | 15 | 15 | 14 | 14 | 14 | 14 | 13 | 13 | 303 | 15 |
| PRS | 27 | 25 | 25 | 23 | 20 | 22 | 20 | 21 | 22 | 22 | 22 | 22 | 21 | 22 | 21 | 20 | 21 | 19 | 18 | 19 | 431 | 22 |
| Buyers | 33 | 30 | 31 | 29 | 25 | 27 | 25 | 27 | 28 | 27 | 27 | 27 | 27 | 27 | 26 | 25 | 26 | 25 | 23 | 24 | 539 | 27 |
| Total | 100 | 93 | 95 | 88 | 78 | 82 | 76 | 82 | 85 | 83 | 74 | 76 | 74 | 75 | 71 | 70 | 71 | 68 | 64 | 67 | 1573 | 79 |

#### **Scenario 4 Falkirk**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Year | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 20 yr total | 20 yr pa |
| SR | 47 | 44 | 45 | 42 | 38 | 38 | 36 | 38 | 39 | 38 | 28 | 28 | 28 | 28 | 26 | 26 | 26 | 25 | 24 | 25 | 670 | 33 |
| BMR | 31 | 28 | 29 | 27 | 23 | 27 | 25 | 27 | 28 | 26 | 25 | 26 | 25 | 26 | 24 | 24 | 24 | 23 | 22 | 23 | 513 | 26 |
| PRS | 6 | 5 | 5 | 5 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 4 | 97 | 5 |
| Buyers | 59 | 55 | 57 | 52 | 45 | 48 | 45 | 48 | 50 | 49 | 48 | 49 | 48 | 48 | 46 | 45 | 46 | 44 | 41 | 44 | 966 | 48 |
| Total | 143 | 132 | 136 | 126 | 111 | 118 | 109 | 117 | 121 | 119 | 106 | 108 | 106 | 107 | 102 | 101 | 101 | 97 | 91 | 96 | 2246 | 112 |

#### **Scenario 4 Denny and Bonnybridge**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Year | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 20 yr total | 20 yr pa |
| SR | 24 | 22 | 23 | 21 | 19 | 19 | 18 | 19 | 19 | 19 | 13 | 13 | 13 | 13 | 12 | 12 | 12 | 12 | 11 | 12 | 326 | 16 |
| BMR | 17 | 16 | 16 | 15 | 13 | 15 | 14 | 15 | 15 | 14 | 14 | 14 | 14 | 14 | 14 | 13 | 13 | 13 | 12 | 13 | 284 | 14 |
| PRS | 26 | 24 | 25 | 23 | 20 | 21 | 20 | 21 | 22 | 22 | 21 | 22 | 21 | 22 | 21 | 20 | 20 | 19 | 18 | 19 | 427 | 21 |
| Buyers | 23 | 21 | 22 | 20 | 18 | 19 | 17 | 19 | 20 | 19 | 19 | 19 | 19 | 19 | 18 | 18 | 18 | 18 | 17 | 17 | 382 | 19 |
| Total | 90 | 84 | 86 | 79 | 70 | 74 | 69 | 74 | 76 | 75 | 67 | 68 | 67 | 68 | 64 | 64 | 64 | 62 | 58 | 61 | 1419 | 71 |

#### **Scenario 4 Bo’ness**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Year | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 20 yr total | 20 yr pa |
| SR | 18 | 17 | 17 | 16 | 14 | 15 | 14 | 15 | 15 | 15 | 10 | 11 | 10 | 11 | 10 | 10 | 10 | 10 | 9 | 9 | 253 | 13 |
| BMR | 11 | 10 | 10 | 9 | 8 | 9 | 8 | 9 | 9 | 9 | 8 | 9 | 8 | 8 | 8 | 8 | 8 | 8 | 7 | 8 | 172 | 9 |
| PRS | 7 | 6 | 6 | 6 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 4 | 5 | 104 | 5 |
| Buyers | 20 | 18 | 19 | 17 | 15 | 16 | 15 | 16 | 17 | 17 | 16 | 16 | 16 | 16 | 15 | 15 | 15 | 15 | 14 | 15 | 322 | 16 |
| Total | 54 | 50 | 51 | 48 | 42 | 45 | 41 | 44 | 46 | 45 | 40 | 41 | 40 | 40 | 38 | 38 | 38 | 37 | 35 | 36 | 851 | 43 |

#### **Scenario 4 Grangemouth**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Year | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 20 yr total | 20 yr pa |
| SR | 24 | 23 | 23 | 22 | 20 | 20 | 18 | 20 | 20 | 20 | 15 | 16 | 15 | 16 | 15 | 15 | 15 | 14 | 13 | 14 | 356 | 18 |
| BMR | 14 | 13 | 14 | 13 | 11 | 13 | 12 | 13 | 13 | 12 | 12 | 12 | 12 | 12 | 12 | 11 | 11 | 11 | 10 | 11 | 242 | 12 |
| PRS | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 | 1 |
| Buyers | 25 | 23 | 23 | 22 | 19 | 20 | 19 | 20 | 21 | 20 | 20 | 20 | 20 | 20 | 19 | 19 | 19 | 18 | 17 | 18 | 401 | 20 |
| Total | 64 | 59 | 61 | 56 | 50 | 53 | 49 | 52 | 54 | 53 | 48 | 49 | 48 | 48 | 46 | 45 | 46 | 44 | 41 | 43 | 1011 | 51 |

#### **Scenario 4 Stenhousemuir, Larbert and Rural North**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Year | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 20 yr total | 20 yr pa |
| SR | 21 | 20 | 20 | 19 | 17 | 17 | 17 | 17 | 18 | 18 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 10 | 10 | 10 | 292 | 15 |
| BMR | 17 | 15 | 16 | 15 | 13 | 14 | 13 | 14 | 15 | 14 | 13 | 14 | 13 | 14 | 13 | 13 | 13 | 12 | 12 | 12 | 274 | 14 |
| PRS | 24 | 22 | 23 | 21 | 18 | 20 | 18 | 19 | 20 | 20 | 20 | 20 | 20 | 20 | 19 | 19 | 18 | 18 | 17 | 17 | 391 | 20 |
| Buyers | 32 | 30 | 31 | 28 | 25 | 26 | 24 | 26 | 27 | 27 | 26 | 27 | 26 | 26 | 25 | 25 | 25 | 24 | 23 | 24 | 530 | 26 |
| Total | 94 | 87 | 90 | 83 | 73 | 78 | 72 | 77 | 80 | 78 | 71 | 72 | 70 | 71 | 68 | 67 | 67 | 65 | 61 | 64 | 1487 | 74 |

1. Registers of Scotland, Property Market Report 2020-2021, <https://www.ros.gov.uk/__data/assets/pdf_file/0019/189001/Property-Market-Report-2020-21.pdf> [↑](#footnote-ref-1)
2. Scottish Fiscal Commission, Scotland’s Economic and Fiscal Forecast, August 2021. [↑](#footnote-ref-2)
3. Scottish Government, New housebuilding and affordable supply quarterly statistics, NB1 [↑](#footnote-ref-3)