**Write-off Model Tool Requirements**

1. **Login Page:**

Required Inputs:

* Unique username
* Unique password

Other requirements:

* Ability to make username and password dormant
* Backend recording of which user has used the tool on a specific claim

1. **Input Page:**

Required Inputs:

* Policy number (this should be verified)
* Claim number (simple checks such as starting digits must be SHS or STH and length of claim number must be 14 digits long)
* Vehiclemake, model, registration number (MMO\_registration), etc. as a drop down
* Cost of repair (incl. VAT). Please state ‘incl. VAT’ explicitly in the field label

Automatically populated (using NOW() function)

* Incident year. This must be the current year or previous year only

Fields to be automatically pulled from Maven:

* Sum insured
* Vehicle make
* Vehicle model
* Vehicle year (this is used to calculate age of vehicle. See Special Relativities)
* Vehicle mass
* Postal code

Other Requirements:

* Calculate button to obtain recommendation, preferably on a separate page.

1. **Calculations for recommendation:**
2. **Additional costs** = Company % \* Cost of repair (incl. VAT)

Company% will be provided as a lookup table

1. **Total cost of repair** = Cost of repair (incl. VAT) + Additional costs
2. **Cost of salvage** = 3 507.50

This amount should be looked up from lookup table

1. **Expected Salvage Recovery** = Base \* Incident year relativity \* Make relativity \* Model relativity \* Age relativity \* Sum insure relativity \* Mass relativity \* Area relativity \* Locks and keys relativity \* Engine start relativity
2. The following factor’s relativities can be looked up directly from the relativities sheet:
   * Incident year

For all other factors, please see special relativities below:

**Special Relativities:**

1. Area

The postal code should be used to lookup the area as provided in the postal code lookup sheet. The area can then be looked up in the relativities sheet.

1. Vehicle Age

Vehicle age = Current year – Vehicle year

This age should be used to look up the relativity from the relativities table.

1. Vehicle Sum Insured (Mul\_SI)

Actual numbers can be found in the Model Output sheet. Depending on the value of the sum insured, the following formulae should be applied:

|  |  |
| --- | --- |
| **Sum Insured (x)** | **Formula to be applied** |
| 0 < x ≤ 28 248.92 | y = 0.458215305189 |
| 28 248.92 < x ≤ 334 351.73 | y = -0.0092514774+ 0.03099951326 + 0.29542405007 + 0.37895053137 |
| 334 351.73 < x ≤ 1 000 000 | y = -0.016931199310 + 0.35098695793 + 0.38325035172 |
| x > 1 000 000 | y = 2.2 |
| Unknowns | y = 0.98208106009 |

1. Vehicle Mass

Actual numbers can be found in the Model Output sheet. Depending on the value of the vehicle mass, the following formulae should be applied:

|  |  |
| --- | --- |
| **Vehicle Mass (x)** | **Formula to be applied** |
| 0 ≤ x ≤ 907.17 | y = 0.832103503686441 |
| 907.17 < x ≤ 1 020.09 | y = 0.148686235 - 0.516733412 |
| 1 020.09 < x ≤ 1 757.38 | y = 1 |
| 1 757.38 < x ≤ 2 228.67 | y = 0.045547193 + 0.199562748 |
| 2 228.67 < x | y = 1.21465936370171 |
| Unknowns | y = 0.832103503686441 |

1. Vehicle Make and Model

Vehicle Model Rule – In the Maven field, extract all characters before the first space and look this value up against the model grouping table provided.

Make and Model – If Make/Model not found in lookup table then relativity = ‘Other’ relativity as found in relativities sheet. The audit trail should record the actual make/model that is pulled through from Maven.

1. **Total Salvage Recovery** = Expected salvage recovery - Cost of salvage
2. **Saving** = |Sum insured(“market value”) – Total salvage recovery – Total cost of repair|. This must be the absolute value.
3. **Recommendation:**

If Sum insured – Total salvage recovery > Total cost of repair then Recommendation = Repair (this should be highlighted in green with sub line reading “Repair vehicle”)

If Sum insured – Total salvage recovery <= Total cost of repair and <= 10% then Recommendation = Write-off (this should be highlighted in orange with sub line reading “Room for negotiation on repair cost to prevent write-off”)

If Sum insured – Total salvage recovery <= Total cost of repair and > 10% then Recommendation = Write-off (this should be highlighted in red with sub line reading “Write-off vehicle”)

Other requirements:

* Previous recommendation should not be visible if any of the inputs are changed.
* A comments box should be available for the assessor to input any comments or reasons for deviation from the recommendation. This comment needs to be saved and recorded in the audit trail. Please can we have an instruction above the comments box stating the following:

“If the above recommendation is not applied , please provide a reason below.”

1. **Logoff:**

* The user must be logged off once the web page is closed or has been inactive for over 30 minutes.
* A save and close button should be available which saves all entries made and logs the user off.

1. **Audit trail:**

* The audit trail should log each of the factors that were input as well as what was pulled through from Maven in order to get a recommendation. The recommendation and any comments made should also be logged.
* The audit trail should also log any changes or updates made on any policy number run through the form.
* The audit trail should capture which assessor was responsible for the entries recorded.