Appendix G – Delta Analysis for Claim and Prepayment Models

Exhibits G.1 through G.22 provide a delta analysis for the conditional claim and prepayment rate models.

The delta analysis we performed consists of calculating the median and standard deviation of the observations at policy year 5 in our sample set for each predictor variable in the claim and prepayment models. We calculate the conditional claim and prepayment rate assuming the median value of each covariate holds – this serves as our base rate level. We then increase the value of each predictor variable, one variable at a time, by one standard deviation and recalculate the claim and prepayment rates. The same process is repeated by decreasing each predictor variable, one variable at a time, by one standard deviation and recalculating the claim and prepayment rates. Exhibits G.1 through G.22 show the "new" rate levels that exist for each covariate and the percentage change relative to the base rate level.

As with any delta-style analysis, the numbers shown on the following exhibits need to be viewed with some degree of caution. If all of the predictor variables were orthogonal, then it would be possible to view the results in isolation. In reality there is some degree of interaction between the predictor variables and it is therefore not possible for a given variable to experience a significant move that is completely independent of a corresponding move in the other variables.