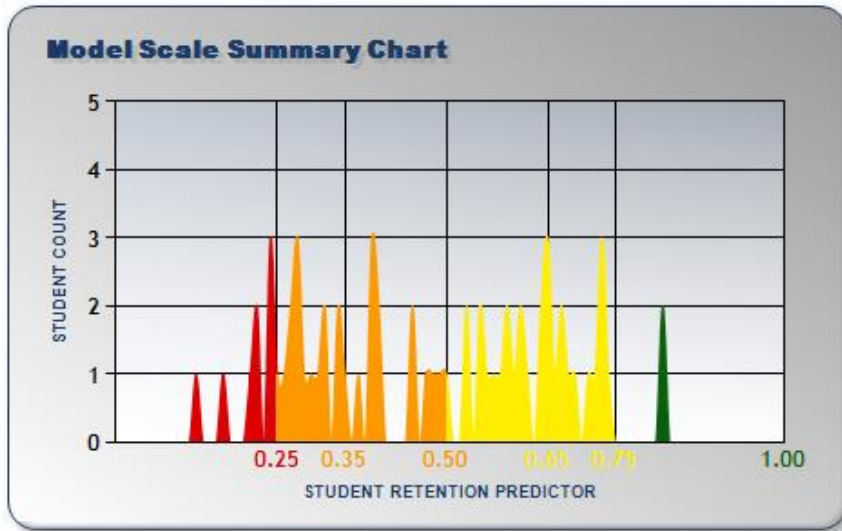


Student Retention Predictor (SRP) Model Scoring

The creation of the Student Retention Predictor (SRP) model utilized NMHU’s enrollment data from 2011 to 2015. Enrollment data included variables (as can be seen in the diagnostic table) such as, student name, ID, DOB, high school GPA, ACT Composite Score, Financial Aid, Percent of Need Met, Parents Income, etc. These data were combined with the Ruffalo Noel Levitz College Student Inventory™ survey information to create a logistic regression model that identified which incoming first-year students (NMHU Fall Class 2016) are less likely to persist, and, of these, which students can be influenced to re-enroll. The Student Retention Predictor assigned every one of our incoming first-time freshmen a score from **.01 (highly unlikely to persist)** to **.99 (highly likely to persist)**. This model in conjunction with the CSI information produced advising reports that were used by the Student Advisors from the Academic Support Office to customize advising sessions with every one of the 2016 freshmen that completed the CSI survey. Below is the model scale summary chart and table demonstrating the NMHU student scores and the number of students within the four ranges (0.0 - 0.25; 0.25 – 0.50; 0.50 – 0.75; 0.75 – 1.00).



| Model Risk Factor Counts | | | | | | | | | |
|--------------------------|-----------|------------|-----------|-----------|----------|----------|---|---|---|
| Number of Risk Factors | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| Number of Students | <u>63</u> | <u>103</u> | <u>84</u> | <u>52</u> | <u>8</u> | <u>2</u> | 0 | 0 | 0 |
| Average SRP Score | 0.71 | 0.55 | 0.4 | 0.25 | 0.18 | 0.11 | 0 | 0 | 0 |

The Student Retention Predictor also identifies key variables impacting student retention at NMHU. The below table shows the top ten ranked variables that predicted retention of students at NMHU and the below chart shows the relative strength of the model variables in the logistic regression modeling.

| | | | Logistic Regression | | |
|------|-----------|--|---------------------|--------|------------|
| Rank | Variable | Label | n | T-Test | Chi-Square |
| 1 | XOPT_R091 | High School GPA (Optimal Binning) | 0.608 | 0.0000 | 0.0000 |
| 2 | R091 | High School GPA | 0.622 | 0.0000 | 0.0000 |
| 3 | XR062 | Academic Major | 0.612 | 0.0000 | 0.0000 |
| 4 | XR015 | Primary County Code | 0.603 | 0.0000 | 0.0000 |
| 5 | XOPT_R173 | Total Gift Funds (Optimal Binning) | 0.593 | 0.0000 | 0.0000 |
| 6 | R534 | Standing | 0.601 | 0.0000 | 0.0000 |
| 7 | R173 | Total Gift Funds | 0.597 | 0.0000 | 0.0000 |
| 8 | XOPT_R534 | Standing (Optimal Binning) | 0.592 | 0.0000 | 0.0000 |
| 9 | XR014 | Primary Zip Code | 0.586 | 0.0000 | 0.0000 |
| 10 | XR263 | City | 0.582 | 0.0000 | 0.0000 |

