

FICO[®] Score 9 based on TransUnion Data
(formerly called FICO[®] Risk Score, Classic)

Release Notes for TransUnion[®]
April 2015

FICO® SCORE 9 – Be Current, Be Compliant, Be Adaptive With The Most Predictive FICO® Score

Release Notes for TransUnion

For years, the marketplace has relied upon the industry standard FICO® Score to assess and educate on consumer credit risk. As part of continually improving the value associated with the FICO® Score, FICO and TransUnion are proud to announce a new major release.

Building off of the innovations and enhancements made in prior releases, the redeveloped FICO® Score 9 based on TransUnion® Data, formerly called FICO® Risk Score, Classic, v9, (will be referenced as “FICO® Score X” with X representing the version number throughout this document) captures recent consumer behavior to give credit grantors better risk assessments across the credit lifecycle and all credit products compared with prior versions. FICO® Score 9 leverages FICO’s state-of-the-art analytic capabilities and predictive technologies and TransUnion’s rich repository of consumer credit information. This release notes document provides general information regarding the benefits of adopting the new major release.

Benefits of Adoption

Using an innovative modeling approach—one supported by strong model risk management—combining sophisticated proprietary analytic technology with insights gained over FICO’s 25 years of building these broad-based credit risk models, FICO® Score 9 provides credit grantors with the most predictive FICO® Score to date across all credit products and credit lifecycles from origination to customer management to capital allocations.

FICO® Score 9 enables credit grantors to:

- **Be Current**—Grow portfolios with more accurate credit risk decisions by using the FICO® Score that best captures today’s consumer credit behavior.
- **Be Compliant**—More easily and confidently comply with all relevant US regulations using the most current, fully documented FICO® Score ever.
- **Be Adaptive**—Ease migration due to compatibility with previous FICO® Score versions - a key design objective of FICO® Score redevelopments in order to limit the operational and implementation impacts. FICO® Score 9 has the same minimum score criteria, reason codes, odds-to-score relationship, and score ranges as prior FICO® Score versions. Score distribution shifts are expected to be limited (nearly 80% of consumers score within 30 points of their score with the prior version).

[Note: depending on how your system indicates model version, you may need to make a minor modification to identify and accept the new model version from TransUnion.]

Relative to prior releases, FICO® Score 9 can help credit grantors increase new account bookings at same/better risk, reduce delinquency & loss while booking same volume, refine risk-based pricing, assign more targeted customer management actions, improve customer satisfaction and better control loss reserves.

Redevelopment Process

The FICO® Score 9 redevelopment is consistent with our pattern of high quality redevelopments every few years to accommodate changes in consumer reporting agency (CRA) data, consumer credit behavior, and associated risk patterns that continue to evolve such as those pertaining to: new data, new credit products, credit grantor reporting, consumer trends, and economic trends.

The FICO® Score model design has remained robust and stable over time, thus supporting credit grantor operations since its inception. The FICO® Score 9 redevelopment leverages the time-proven robust design with “seamless” enhancements, to raise model performance where credit grantors need it most, while limiting implementation and operational impacts and continuing to support credit grantors who rely on the scores as part of their efforts to meet regulatory requirements. This increases the predictive benefits without requiring that credit grantors undertake substantial system changes.

Development & Availability

FICO® Score 9 was generated from a statistically-derived random sample of six million matched sets of depersonalized TransUnion consumer credit files from observation and performance dates of October 2011 and October 2013, respectively. FICO® Score 9 is available as of November 2014 for online and offline processing.

Features and Enhancements

Based on extensive research, examples of the improvements made in FICO® Score 9 include:

- A more refined way to assess collection information. Backed by scientific research, these improvements help credit grantors because they result in greater precision.
 - All paid collection agency accounts will be excluded from the score calculation regardless of dollar amount.
 - FICO® Score 9 will also provide a more sophisticated treatment for unpaid collections, differentiating medical from non-medical collection agency accounts. This will help ensure that medical collections have a lower impact on the score, commensurate with the credit risk they represent.
- Further refined thin file treatments. FICO® Score 9 addresses credit grantors' desire for more effective risk assessment of consumers with limited credit history, or so-called thin files. Validation results demonstrate improved risk prediction for this segment of the population.

- The addition of a scorecard for consumers with a high amount of revolving debt. These consumers are at a greater risk of filing for bankruptcy and by breaking this group out separately, FICO® Score 9 can do an even better job in predicting bankruptcies as well as other forms of delinquency.

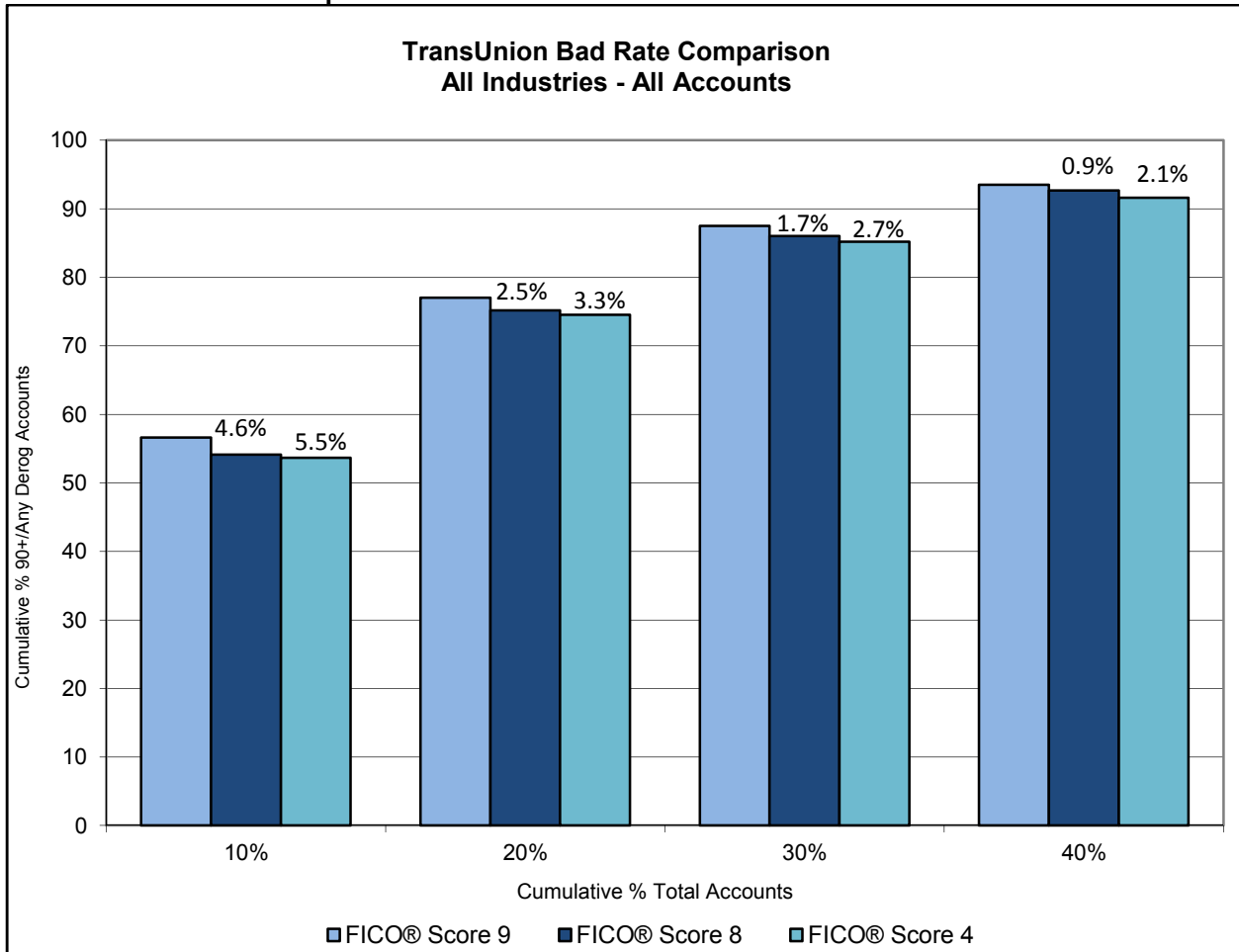
Score Performance Charts

Figures 1 and 2 demonstrate how various population segments perform between FICO® Score 9 and prior releases. In Figure 1, we compare the predictive strength of each model version by plotting the percentage of future “bads” identified (those 90+ days past due or worse over the 24 months since scoring—the “performance window”) relative to the percentage of total accounts for that population segment. This means that at the same volume cutoff, there would be more “bads” below the cutoff such that those above the cutoff represent less risk.

When evaluating score performance from these graphs, you should consider that increasing the number of “bads” identified by the updated score means the new score is pushing more “bads” to lower score ranges such that there would be fewer high-risk consumers targeted for positive action such as approvals among applicants or line increases among existing customers.

Figure 1 below illustrates the performance difference between FICO® Score 9, FICO® Score 8 (formerly called FICO® Risk Score, Classic 08) and FICO® Score 4 (formerly called FICO® Risk Score, Classic 04) for all accounts and all industries as identified in the 2011-2013 development sample provided by TransUnion.

FIGURE 1: Bad Rate Comparison



At the lowest scoring 10% of the total accounts in the development sample, FICO® Score 9 identified 56.6% of the accounts that performed unsatisfactorily during the performance window, as compared to 54.1% for FICO® Score 8 and 53.7% for FICO® Score 4. This illustrates a 4.6% improvement in lift that may be achieved by using the FICO® Score 9 versus FICO® Score 8 and a 5.5% improvement versus FICO® Score 4. This chart also illustrates improvement at the 20%, 30%, and 40% cutoff levels respectively—and shows that FICO® Score 9 is doing a better job of identifying bad accounts.

Figure 2 below shows the Kolmogorov–Smirnov (KS) statistic based on the total population from the development data across different industries (e.g., bankcard) and lifecycles (e.g. new accounts) for FICO® Score 9, FICO® Score 8 and FICO® Score 4.

**FIGURE 2: KS Comparison
TransUnion, Total Population, Oct 2011-Oct 2013**

Performance	KS		
	FICO® Score 9	FICO® Score 8	FICO® Score 4
All Industries, All Accounts	64.42	62.64	61.98
All Industries, New Accounts	57.11	54.99	54.42
All Industries, Existing Accounts	65.20	63.47	62.79
Bankcard, Existing Accounts	64.78	62.66	61.25
Bankcard, New Accounts	61.46	59.62	58.93
Auto Finance, New Accounts	58.16	56.61	56.26
Mortgage, Existing Accounts	72.86	71.08	71.68
Mortgage, New Accounts	59.15	57.44	56.36

As you can observe from Figure 2, the KS associated with FICO® Score 9 is higher than prior score versions in all cases.

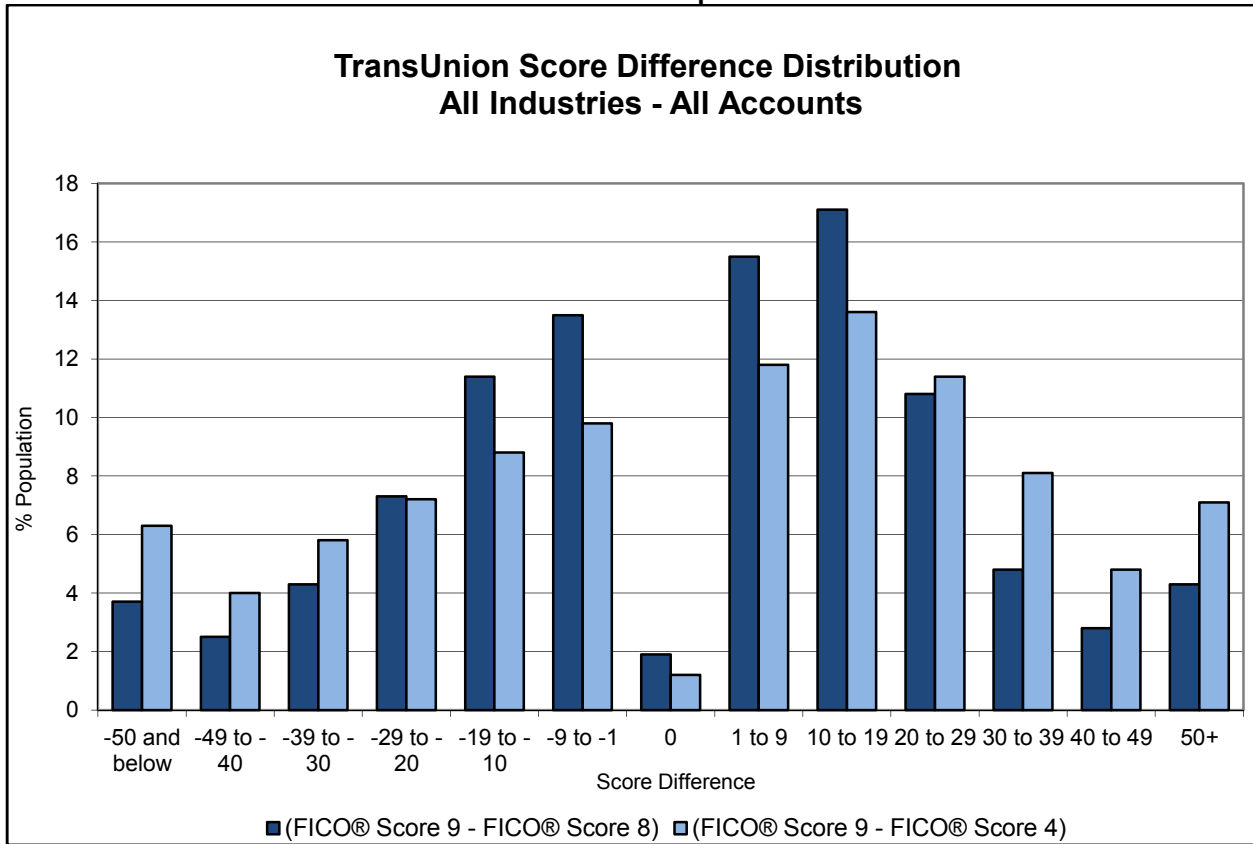
For additional score performance information contact your FICO or TransUnion representative.

Score Movement Charts

Figure 3 is provided to help credit grantors understand the potential operational impacts associated with switching from FICO® Score 4 or FICO® Score 8 to FICO® Score 9.

Figure 3 is a summary of the individual score differences between FICO® Score 4, FICO® Score 8 and FICO® Score 9 based on the development data. The differences are distributed in both positive and negative directions—showing FICO® Score 9 is doing a more effective job scoring riskier accounts lower and good accounts higher—with slightly more people scoring higher overall with FICO® Score 9.

FIGURE 3: Individual Consumer Score Movement Comparison



The vertical bar labeled “1 to 9” illustrates that 16% of the development sample experienced an increase in score between 1 and 9 points when FICO® Score 9 was used in place of FICO® Score 8 and 12% when used in place of FICO® Score 4. The vertical bar labeled “-9 to -1” illustrates that 13% experienced a decrease in score between 1 and 9 points when FICO® Score 9 was used in place of FICO® Score 8 and 10% when used in place of FICO® Score 4. Combining the 9 point difference bars, plus the no difference “0” bar, you see that close to 31% of the development sample scored within (+) or (-) 1 to 9 points on the FICO® Score 9 as they did on FICO® Score 8 and 23% for FICO® Score 4.

Figures 4 and 5 illustrate the movement of scores from FICO® Score 4 and FICO® Score 8 to the FICO® Score 9. These charts track score movement across the development population for specific score ranges. In this case, score movement is predominantly limited to plus or minus a single 40-point score band from the prior model score range. Thus, credit grantors should generally see only minor score shifts when converting to FICO® Score 9—but may need to slightly adjust strategies or expectations of the number of consumers falling into various strategy decisions.

FIGURES 4 and 5: Population Score Movement – Crosstab

**TransUnion Score Movement Comparison
All Industries - All Accounts**

FICO® Score 8	FICO® Score 9							
	300-559	560-599	600-639	640-679	680-719	720-759	760-799	800-850
300-559	83.3%	12.9%	3.5%	0.3%	0.0%	0.0%	0.0%	0.0%
560-599	32.5%	38.4%	22.6%	5.9%	0.6%	0.0%	0.0%	0.0%
600-639	4.0%	21.0%	41.7%	26.8%	5.9%	0.6%	0.1%	0.0%
640-679	0.1%	1.5%	16.4%	50.5%	26.2%	4.6%	0.7%	0.1%
680-719	0.0%	0.0%	0.8%	18.1%	52.1%	24.2%	4.1%	0.7%
720-759	0.0%	0.0%	0.0%	0.6%	19.3%	53.2%	24.9%	2.0%
760-799	0.0%	0.0%	0.0%	0.0%	0.3%	13.4%	56.3%	30.0%
800-850	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	6.7%	93.2%

Find the cell corresponding to the 640-679 score ranges for FICO® Score 8 and FICO® Score 9. This cell illustrates that of those scoring in the 640-679 range on FICO® Score 8, 50.5% of the development files also scored in the 640-679 range using FICO® Score 9. Now find the cell that corresponds to the 640-679 range for FICO® Score 8 and the 600-639 range for FICO® Score 9. This cell illustrates that of those scoring in the 640-679 range on FICO® Score 8, 16.4% of the development files scored slightly lower (600-639) using FICO® Score 9.

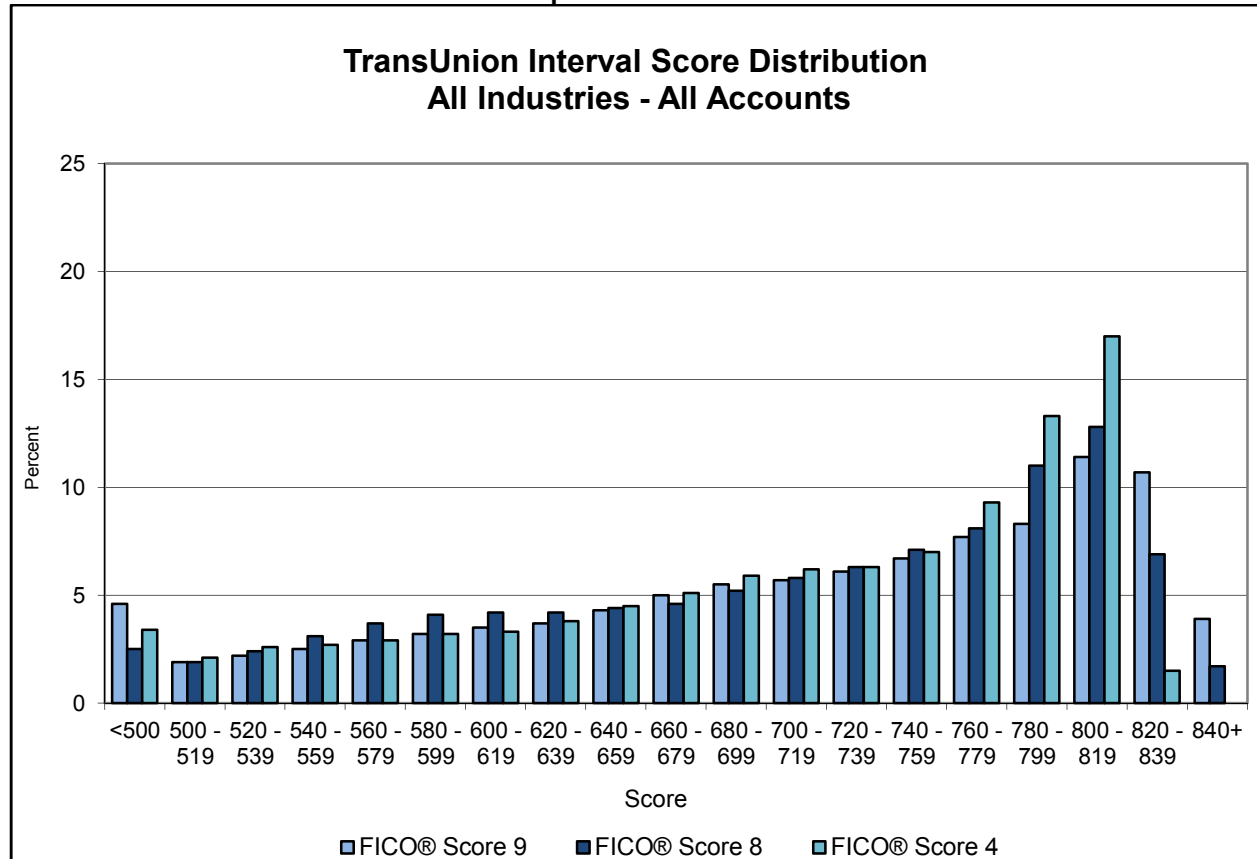
**TransUnion Score Movement Comparison
All Industries - All Accounts**

FICO® Score 4	FICO® Score 9							
	300-559	560-599	600-639	640-679	680-719	720-759	760-799	800-850
300-559	79.5%	15.0%	4.7%	0.7%	0.1%	0.0%	0.0%	0.0%
560-599	34.2%	35.8%	22.4%	6.6%	0.9%	0.1%	0.0%	0.0%
600-639	7.5%	25.6%	36.9%	23.1%	5.9%	0.8%	0.1%	0.0%
640-679	0.5%	5.4%	23.2%	40.8%	22.8%	6.0%	1.1%	0.1%
680-719	0.0%	0.3%	3.4%	23.6%	40.4%	23.4%	6.9%	2.0%
720-759	0.0%	0.0%	0.1%	3.1%	24.8%	43.9%	24.1%	3.8%
760-799	0.0%	0.0%	0.0%	0.1%	1.6%	14.8%	42.8%	40.7%
800-850	0.0%	0.0%	0.0%	0.0%	0.1%	1.0%	12.2%	86.7%

And of those scoring in the 640-679 range on FICO® Score 4, 40.8% also scored from 640-679 using FICO® Score 9, while 23.2% scored slightly lower (600-639) using FICO® Score 9.

Figure 6 compares the new score distribution of FICO® Score 9 versus FICO® Score 8 and FICO® Score 4 based upon the development data. This graph illustrates the shift in scores at a particular score interval between FICO® Score 9 compared to the prior versions.

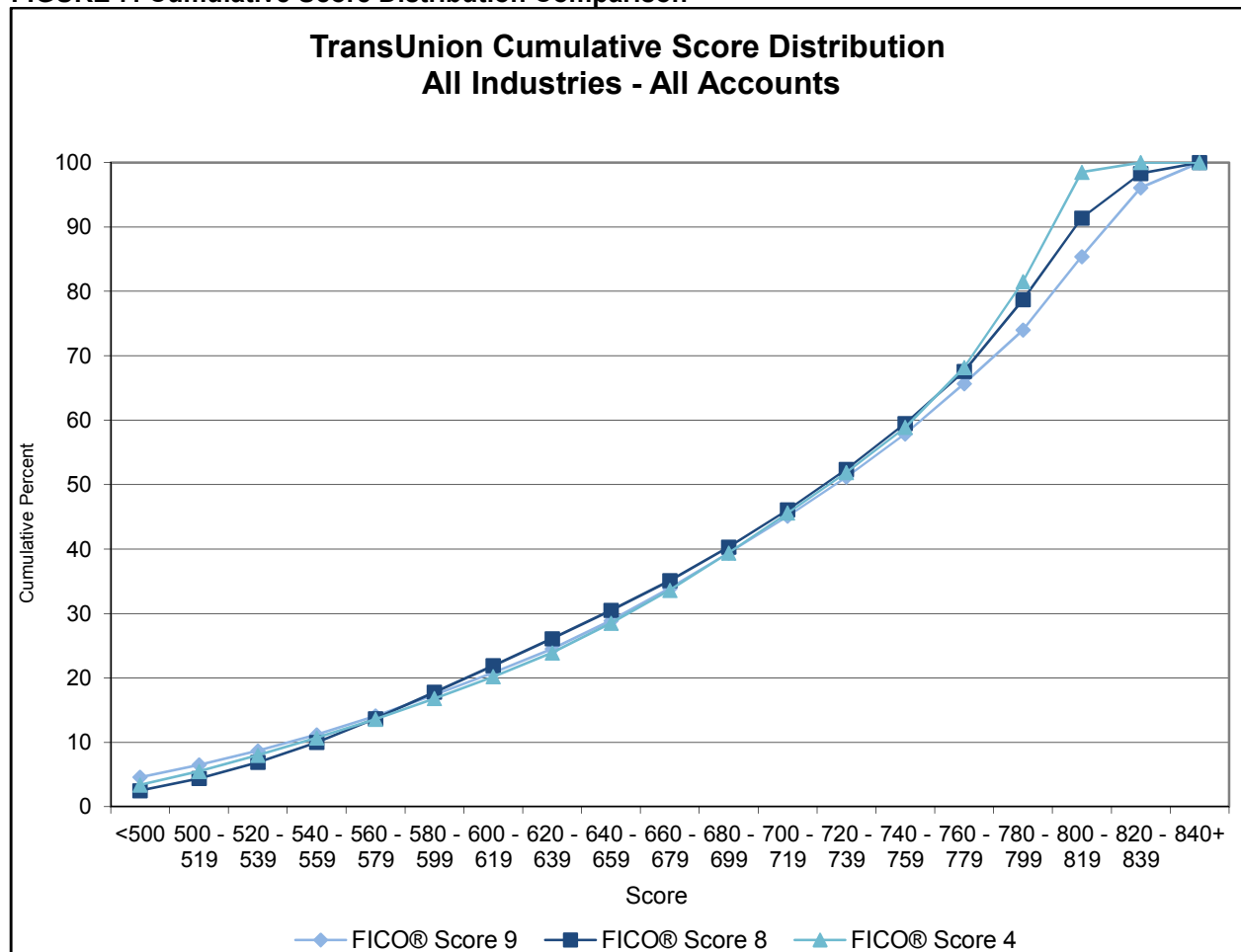
FIGURE 6: Interval Score Distribution Comparison



In general, there are a few modest distributional changes with slightly more consumers scoring below 500 and above 800 with FICO® Score 9 compared to FICO® Score 8 and FICO® Score 4. Keep in mind that credit grantors may see score shifts that differ from those observed in the development sample. As such, credit grantors are encouraged to validate the FICO® Score 9 model on their own portfolios and may need to adjust score cutoffs to meet business objectives.

Figure 7 illustrates the percentage of the total population at or below a particular score cutoff. This chart shows the difference in cumulative distribution between FICO[®] Score 9, FICO[®] Score 8 and FICO[®] Score 4 based on the development sample. Our objective in this model redevelopment was to boost the FICO[®] Score predictive performance while constraining cumulative score distributions to closely match prior versions.

FIGURE 7: Cumulative Score Distribution Comparison



For example, 28% of the population received a score of 659 or less for the FICO[®] Score 4, 30% for FICO[®] Score 8 and 29% for FICO[®] Score 9. Also, at a higher score, 68% of the population received a score of 779 or less with the FICO[®] Score 4, 68% for FICO[®] Score 8 and 66% for FICO[®] Score 9.

For additional score movement information, contact your FICO or TransUnion representative.

Swap Set Comparisons

Figures 8 and 9 are provided to help credit grantors understand the percentage of consumers experiencing score movement and the associated changes in odds for these consumers' accounts by way of "swap" comparisons from FICO® Score 4 and FICO® Score 8 to FICO® Score 9. The following tables show the percentage of consumers above and below a particular cut-off point with FICO® Score 4 and FICO® Score 8, plus information regarding the percentage of consumers and associated account level odds for those scoring lower and higher with FICO® Score 9. Consumers shifting to higher scores have higher odds (better performing) and those shifting to lower scores have lower odds (worse performing). Thus, the results below show that the FICO® Score 9 is better at classifying risk than the FICO® Score 4 and FICO® Score 8.

FIGURES 8 and 9: Swap Set Comparison

TransUnion Swap set Odds All Industries - All Accounts 90+ vs. Total

Cutoff FICO® Score 8	Above Cutoff Percent FICO® Score 8	Below Cutoff Percent FICO® Score 8	Swapped Above Percent	Swapped Below Percent	Swapped Above Odds	Swapped Below Odds	Swapped Above Average FICO® Score 9	Swapped Below Average FICO® Score 9
580	86.3	13.7	2.2	2.6	5.8	3.0	603.7	556.0
620	78.1	21.9	3.0	1.9	10.1	5.3	644.0	600.1
660	69.5	30.5	3.5	1.8	19.0	9.9	681.9	644.9
700	59.7	40.3	3.5	2.5	37.7	19.7	721.9	685.9
740	47.6	52.4	3.9	2.8	84.5	53.6	760.3	726.3

Compared to FICO® Score 8, at a score cut-off of 660, 1.8% of the accounts in the development sample score lower using the FICO® Score 9 with odds of 9.9 to 1 whereas 3.5% score higher with FICO® Score 9 with odds of 19.0 to 1, indicating that FICO® Score 9 scored these records more appropriately, better predicting their future risk level.

TransUnion Swap set Odds All Industries - All Accounts 90+ vs. Total

Cutoff FICO® Score 4	Above Cutoff Percent FICO® Score 4	Below Cutoff Percent FICO® Score 4	Swapped Above Percent	Swapped Below Percent	Swapped Above Odds	Swapped Below Odds	Swapped Above Average FICO® Score 9	Swapped Below Average FICO® Score 9
580	86.4	13.6	2.3	2.8	5.6	3.1	606.9	554.0
620	79.8	20.2	2.5	3.2	9.4	5.4	645.5	595.1
660	71.5	28.5	3.1	3.4	17.7	9.6	685.1	637.8
700	60.6	39.4	4.1	4.0	39.1	17.9	728.1	680.2
740	48.1	51.9	4.9	4.2	93.0	41.9	765.3	719.9

Compared to FICO® Score 4, at a score cut-off of 660, 3.4% of the accounts in the development sample score lower using the FICO® Score 9 with odds of 9.6 to 1 whereas 3.1% score higher with FICO® Score 9 with odds of 17.7 to 1, indicating that FICO® Score 9 scored these records more appropriately, better predicting their future risk level.

For additional swap set information, contact your FICO or TransUnion representative.

FICO® Industry Scores

FICO® Auto Score 9 based on TransUnion Data

Formerly called FICO® Risk Score, Classic Auto XX or EMPIRICA, FICO® Auto Score 9 based on TransUnion Data will be referenced as “FICO® Auto Score X” with X representing the version number throughout this document.

FICO® Bankcard Score 9 based on TransUnion Data

Formerly called FICO® Risk Score, Classic Bankcard XX or EMPIRICA, FICO® Bankcard Score 9 based on TransUnion Data will be referenced as “FICO® Bankcard Score X” with X representing the version number throughout this document.

Building off of the innovations and enhancements made in the redeveloped FICO® Score 9 (base score), FICO® Auto Score 9 and FICO® Bankcard Score 9 capture recent consumer behavior to give credit grantors better risk assessments specifically for auto and bankcard portfolios compared with prior versions. FICO® Auto Score 9 and FICO® Bankcard Score 9 leverage FICO’s state-of-the-art analytic capabilities and predictive technologies and TransUnion’s rich repository of consumer credit information. This section provides general information regarding the benefits of adopting the new FICO® Industry Scores.

Each FICO® Industry Score model contains additional predictive credit characteristics specific to that industry that enhance the model performance. The FICO® Industry Scores can offer improved lift over the prior versions of the FICO® Industry Scores.

Like the prior versions, the FICO® Industry Score models have:

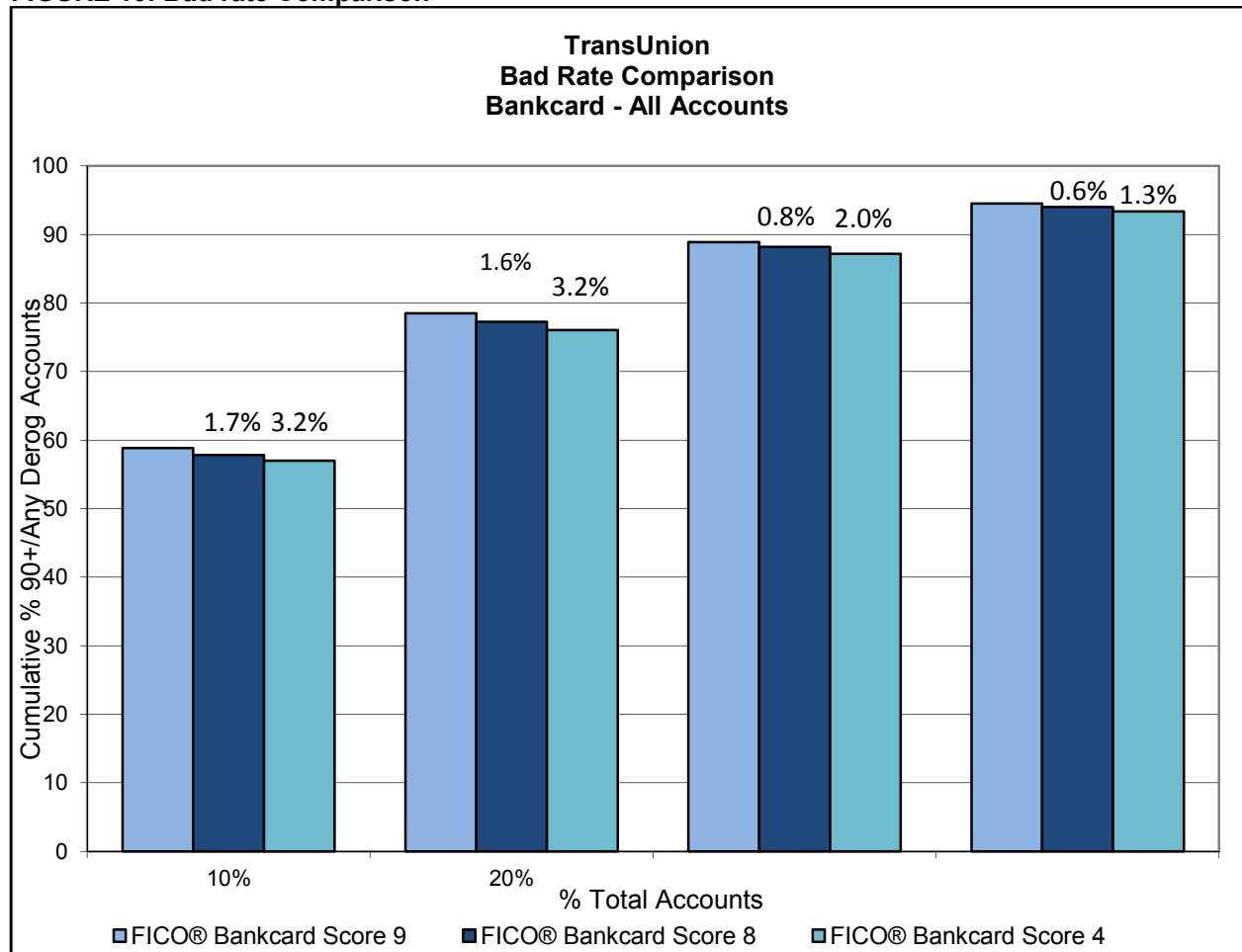
- The same score range of 250-900
- The same reason codes as prior versions of the industry scores (an expanded list beyond the base FICO® Scores)
- The same odds to score relationship
- The same inquiry buffer period and de-duplication logic
- The same minimum scoring criteria

Development & Availability

FICO® Industry Scores were generated from a statistically-derived random sample of six million matched sets of depersonalized TransUnion consumer credit files from observation and performance dates of October 2011 and October 2013, respectively. FICO® Industry Scores are available as of April 16th, 2015 for online and offline processing.

Figure 10 below illustrates the performance difference between FICO® Bankcard Score 9, FICO® Bankcard Score 8, and FICO® Bankcard Score 4, for all bankcard accounts as identified in the 2011-2013 development sample provided by TransUnion.

FIGURE 10: Bad rate Comparison



In the lowest scoring 10% of all bankcard accounts, 58.8% percent of the unsatisfactorily performing accounts were identified with the FICO® Bankcard Score 9 in comparison to 57.8% with the FICO® Bankcard Score 8 model, and 57.0% with FICO® Bankcard Score 4. This represents a 1.7% improvement in risk prediction using the redeveloped FICO® Bankcard Score 9 vs. the FICO® Bankcard Score 8 and a 3.2% improvement over FICO® Bankcard Score 4.

For additional bad rate comparison information, contact your FICO or TransUnion representative.

Figure 11 illustrates the movement of scores from the FICO® Bankcard Score 8 version to the new FICO® Bankcard Score 9. This chart tracks score movement for all bankcard accounts across the development population for specific score ranges. In this case, score movement is predominantly limited to plus or

minus a single score band from the prior model score range. Thus, lenders should not expect dramatic score shifts when converting to the FICO® Bankcard Score 9 from the FICO® Bankcard Score 8, but may need to slightly adjust strategies or expectations of the number of consumers falling into various strategy decisions.

FIGURE 11: Population Score Movement – Crosstab

**TransUnion Score Movement Comparison
Bankcard – All Accounts**

FICO® Bankcard Score 8	FICO® Bankcard Score 9							
	250-559	560-599	600-639	640-679	680-719	720-759	760-799	800-900
250-559	83.5%	12.1%	4.0%	0.3%	0.0%	0.0%	0.0%	0.0%
560-599	30.8%	40.8%	23.4%	4.7%	0.3%	0.0%	0.0%	0.0%
600-639	2.5%	19.2%	46.2%	27.7%	4.0%	0.2%	0.0%	0.0%
640-679	0.0%	1.1%	15.8%	54.2%	26.1%	2.5%	0.3%	0.0%
680-719	0.0%	0.0%	0.6%	18.6%	55.0%	22.7%	2.5%	0.6%
720-759	0.0%	0.0%	0.0%	0.7%	19.2%	53.1%	24.5%	2.5%
760-799	0.0%	0.0%	0.0%	0.0%	0.6%	17.1%	55.3%	27.0%
800-900	0.0%	0.0%	0.0%	0.0%	0.0%	0.3%	8.1%	91.6%

Find the cell corresponding to the 640-679 score ranges for FICO® Bankcard Score 8 and FICO® Bankcard Score 9. This cell illustrates that of those scoring in the 640-679 range on FICO® Bankcard Score 8, 54.2% of the development files also scored in the 640-679 range using FICO® Bankcard Score 9. Now find the cell that corresponds to the 640-679 range for FICO® Bankcard Score 8 and the 600-639 range for FICO® Bankcard Score 9. This cell illustrates that of those scoring in the 640-679 range on FICO® Bankcard Score 8, 15.8% of the development files scored slightly lower (600-639) using FICO® Bankcard Score 9.

For additional score movement comparison information, contact your FICO or TransUnion representative.

Figure 12 shows the swap set between the FICO® Bankcard Score 9 and the FICO® Bankcard Score 8 for consumers with bankcard accounts.

FIGURE 12: Swap Set Comparison

Swap Set Odds
FICO® Bankcard Score 8 vs FICO® Bankcard Score 9
Bankcard, All Accounts 90+ vs. Total

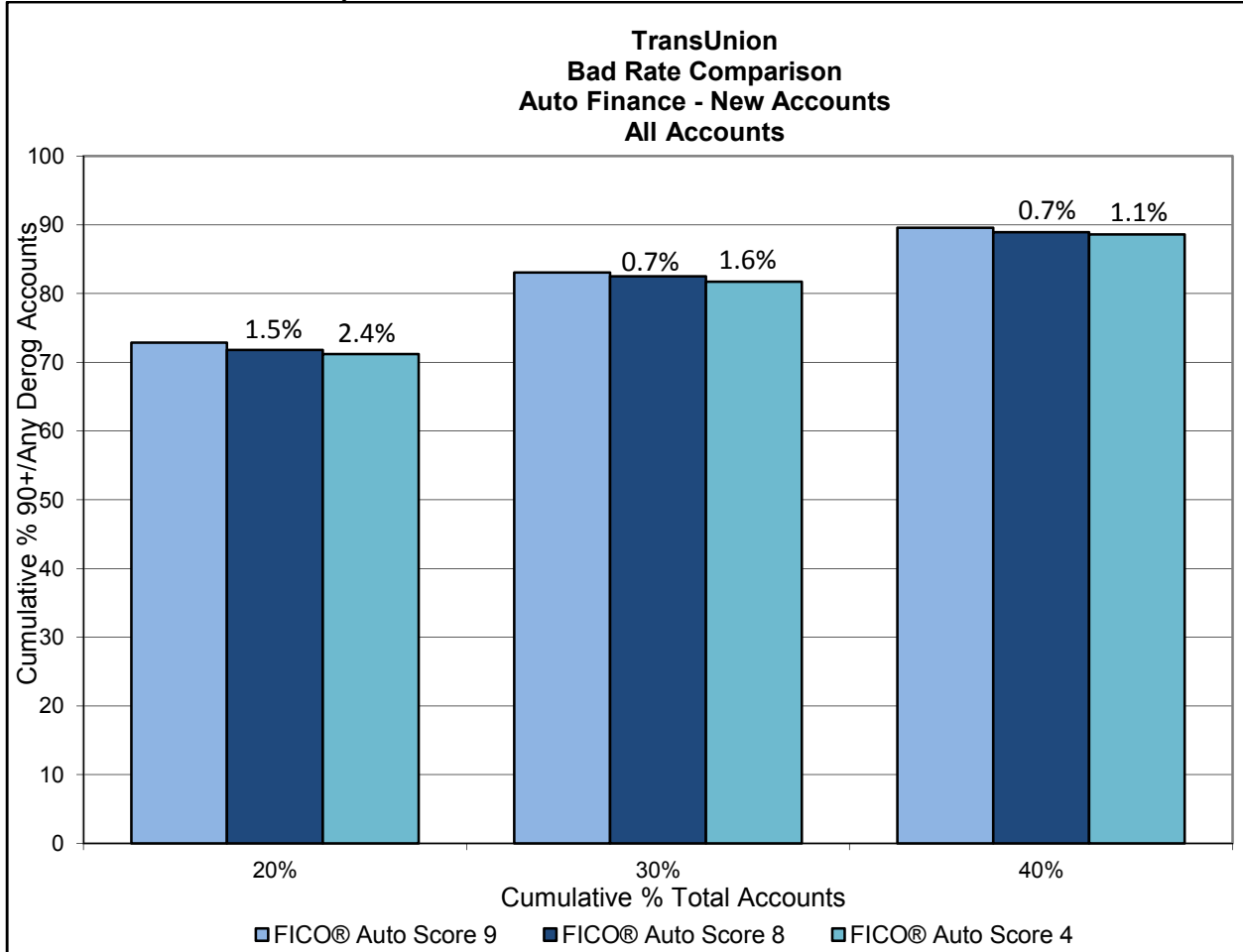
FICO® Bankcard Score 8 Cutoff	Above Cutoff Percent FICO® Bankcard Score 8	Below Cutoff Percent FICO® Bankcard Score 8	Swapped Above Percent	Swapped Below Percent	Swapped Above Odds	Swapped Below Odds	Swapped Above Average Score FICO® Bankcard Score 9	Swapped Below Average Score FICO® Bankcard Score 9
580	93.1	6.9	1.1	1.7	3.0	1.7	603.7	559.3
620	87.1	12.9	2.1	1.6	5.3	3.4	641.2	602.2
660	78.7	21.3	3.0	1.9	10.8	6.6	678.3	645.9
700	68.2	31.8	3.1	2.6	21.4	13.5	718.1	685.8
740	56.1	43.9	3.5	2.7	49.1	33.1	759.5	725.2

At a score cut-off of 660, 1.9% of all consumers with bankcard accounts in the development sample score lower using the FICO® Bankcard Score 9 with odds of 6.6 to 1, whereas 3.0% score higher with the FICO® Bankcard Score 9 with higher odds of 10.8 to 1, indicating the FICO® Bankcard Score 9 scored these records more appropriately, better predicting their future risk level.

For additional swap set odds information, contact your FICO or TransUnion representative.

Figure 13 shows the performance difference between FICO® Auto Score 9, FICO® Auto Score 8, and FICO® Auto Score 4 for new auto finance accounts from the development sample.

FIGURE 13: Bad Rate Comparison



In the lowest scoring 20% of consumers with new auto finance accounts, 72.9% percent of the unsatisfactorily performing accounts were identified with FICO® Auto Score 9 in comparison to 71.8% with the FICO® Auto Score 8 model and 71.2% with FICO® Auto Score 4. This represents a 1.5% improvement in risk prediction using the redeveloped FICO® Auto Score 9 model vs. the FICO® Auto Score 8 model and a 2.4% improvement in risk prediction versus FICO® Auto Score 4.

For additional bad rate comparison information, contact your FICO or TransUnion representative.

Figure 14 illustrates the score movement from the FICO® Auto Score 8 version to the new FICO® Auto Score 9. This chart shows that score movement for new auto accounts is predominantly limited to plus or minus a single score band from the prior model score range. Thus, lenders should not expect dramatic score shifts when migrating to FICO® Auto Score 9 from FICO® Auto Score 8, but may need to slightly adjust strategies or expectations of the number of consumers falling into various strategy decisions.

FIGURE 14: Population Score Movement – Crosstab

**TransUnion Score Movement Comparison
Auto – All Accounts**

FICO® Auto Score 8	FICO® Auto Score 9							
	250-559	560-599	600-639	640-679	680-719	720-759	760-799	800-900
250-559	79.6%	14.6%	5.2%	0.6%	0.0%	0.0%	0.0%	0.0%
560-599	22.4%	42.8%	27.3%	6.9%	0.5%	0.0%	0.0%	0.0%
600-639	2.0%	18.0%	46.9%	28.1%	4.7%	0.3%	0.0%	0.0%
640-679	0.0%	1.0%	16.5%	53.9%	25.7%	2.6%	0.2%	0.0%
680-719	0.0%	0.0%	0.8%	18.4%	58.3%	20.2%	1.9%	0.3%
720-759	0.0%	0.0%	0.0%	0.7%	20.9%	57.3%	19.4%	1.7%
760-799	0.0%	0.0%	0.0%	0.0%	0.8%	21.2%	58.2%	19.8%
800-900	0.0%	0.0%	0.0%	0.0%	0.0%	0.4%	11.6%	87.9%

Find the cell corresponding to the 640-679 score ranges for FICO® Auto Score 8 and FICO® Auto Score 9. This cell illustrates that of those scoring in the 640-679 range on FICO® Auto Score 8, 53.9% of the development files also scored in the 640-679 range using FICO® Auto Score 9. Now find the cell that corresponds to the 640-679 range for FICO® Auto Score 8 and the 600-639 range for FICO® Auto Score 9. This cell illustrates that of those scoring in the 640-679 range on FICO® Auto Score 8, 16.5% of the development files scored slightly lower (600-639) using FICO® Auto Score 9.

For additional score movement comparison information, contact your FICO or TransUnion representative.

Figure 15 below illustrates the swapset comparison between the FICO® Auto Score 9 and the FICO® Auto Score 8 for consumers with new auto finance accounts as identified in the development sample.

FIGURE 15: Swap Set Comparison

**Swap Set Comparison
FICO® Auto Score 8 vs FICO® Auto Score 9
Auto Finance, New Accounts 90+ vs. Total**

FICO® Auto Score 8 Cutoff	Above Cutoff Percent FICO® Auto Score 8	Below Cutoff Percent FICO® Auto Score 8	Swapped Above Percent	Swapped Below Percent	Swapped Above Odds	Swapped Below Odds	Swapped Above Average Score FICO® Auto Score 9	Swapped Below Average Score FICO® Auto Score 9
580	85.8	14.2	2.7	2.0	13.1	9.7	605.5	561.0
620	77.5	22.5	3.5	2.0	26.2	17.1	641.6	602.8
660	67.3	32.7	3.9	2.2	46.1	31.2	678.4	644.9
700	55.0	45.0	3.5	2.7	73.3	45.4	717.0	686.1
740	42.2	57.8	3.2	2.8	140.4	97.8	757.0	725.7

At a score cut-off of 660, 2.2% of all consumers with new auto accounts in the development sample score lower using FICO® Auto Score 9 with odds of 31.2 to 1, whereas 3.9% score higher with FICO® Auto Score 9 with higher odds of 46.1 to 1, indicating the FICO® Auto Score 9 scored these records more appropriately, better predicting their future risk level.

For additional swap set information, contact your FICO or TransUnion representative.

Transitioning to the newest version

Credit grantors using the FICO® Score for originations often use one of two options when adopting the newer version. A similar approach may be used when adopting the new release for account management or prescreening:

Maintain the same cutoffs currently being used, understanding that the volumes above and below that cutoff may change.

- The FICO® Score is not set to fixed odds or PDO (points to double the odds) but rather are scaled to allow for the natural odds drift that occurs over time. FICO aligns the newer version of the score to maintain the prior version's odds-to-score relationship (as measured on the newer development sample). Using the same score cutoff may yield similar performance results, although credit grantors are encouraged to validate performance at a given score range based on their own customer performance, which may vary from the development data.
- The degree of score distribution shift observed between FICO® Score 9, FICO® Score 8, and FICO® Score 4 in the development data was similar to that typically observed with prior releases. Most consumers will score within +/- 30 points between versions. However, individual credit grantor results may vary based on marketing strategy and brand, targeting practices, and products and terms offered.

Maintain current acceptance rates, understanding that this may require score cutoffs to be adjusted to maintain those rates.

- Please note that lowering cutoffs to meet an expected acceptance rate could result in incrementally increased risk. Careful testing and incremental adjustments will enable credit grantors to better gauge the impact from such actions.
- As always, FICO recommends that you track and validate the FICO® Score on your own portfolio on a periodic basis to determine optimal usage of the scores and thresholds in meeting your business objectives. Doing so will enable you to keep pace with periodic shifts that occur in both score distributions as well as expected default rates at a given score range.
- Credit grantors may observe performance odds or bad rate changes on their applicant, prospect or customer populations over time, or may request archive scores from TransUnion to evaluate anticipated performance shifts at the same score cutoffs to better understand portfolio and vintage level risk impacts when using the same score cutoffs in future strategy decisions. Contact your FICO or TransUnion representative if you'd like to explore how we may help you validate, diagnose and/or monitor your portfolio and business strategies.

For more information, please contact FICO® Score Support at scoresupport@fico.com.