





# **Service Offerings**

# Enterprise Risk Management

## Model Risk Management Program

- ERM Model Governance Policy development
- · Model Inventory and Risk Rating method
- Model Development Standards
- · Model Documentation framework
- · Model Validation
- Custom Designed Analytics
- · Stress Testing analysis
- · Gap Analysis to best practices

## Independent Model Validation

- · Independent Examination
- Fully regulatory compliant with FDIC/OCC/Fed/FHFA guidance
- · Rigorous test-case design and execution
- Seven (7) sections cover key regulatory focus
- Fifty (50+) test-cases covering all details
- Comprehensive report and recommendations

# **Analytical Model Development**

#### **Analytical Model Development**

- CECL Life of Loan Expected Loss Analysis
- Loan performance risk analysis with advanced statistical modeling techniques for interest rates, prepayment, and credit risk.
- · Scorecards for loan underwriting
- Stress Testing
- · BASEL loss modeling
- · Economic Capital simulation modeling

## Benchmarking

Independent proprietary model comparisons

#### MBS/ABS Data Warehouse

- Tracking 2,500 MBS/ABS deals and 12.7 million of loans spanning 15 years.
- Vast data warehouse enables development of loan performance and behavioral models.

# Predictive Solutions

- Quantitative ModelingOrigination Decision Models
- Credit Scorecards
  - Consumer credit, Auto, Mortgage, Line, Loan, Heloc
- Loan performance behavior models
  - Prime, Subprime, Alt-A, 1st/2nd Lien,
- · Cash Flow, prepayment and valuation
- CECL and ALLL Modeling
- Loss Exposure Analysis
- Point in Time and Life of Loan Analysis
- Economic Capital modeling
- Repurchase Exposure Analysis
- Loss Mitigation Analysis
- Security Performance Review
- Security Predictive Forecast
- Residential Housing Analytics
- Statistical risk ranking

#### Consumer - Retail

• Consumer credit, loans, Auto, credit cards, student loans, installment loans, Lines, HELOC

#### Commercial - Wholesale

- Commercial Real Estate (CRE), Commercial and Industrial (C&I), Construction and Development, Auto, Lease Finance **Mortgage**
- Single family residential (fixed, ARM, prime, subprime, Alt-A), pay-option ARM, multi-family, reverse mortgages, HELOC, CRE **Mortgage Backed Securities (MBS)**
- Single class MBS, multi-class MBS (strips, CMOs, CDOs, CMBS), servicing rights

### **Asset Backed Securities (ABS)**

· Auto, credit cards, student loans, installment loans, HELOC, CLO, CDO

#### **Miscellaneous Assets**

• Deposits, Derivatives, Corporate and Muni Bonds, Treasuries, FHLB Advances, leases, personal loans, installment loans, Lines