



**GENERAL SERVICES ADMINISTRATION  
FEDERAL SUPPLY SERVICE  
AUTHORIZED FEDERAL SUPPLY SCHEDULE PRICE LIST**

**Authorized Federal Supply Schedule  
Price List and Catalog**

Schedule Title: Financial and Business Solutions (FABS)  
FSC Group: 520  
SIN: 520- 13: Complementary Financial Management Services  
SIN: 520- 17: Risk Assessment and Mitigation Services  
Contract Number: GS-23f-030CA

On-line access to contract ordering information, terms and conditions, up-to-date pricing, and the option to create an electronic delivery order are available through GSA Advantage!, a menu-driven database system. The Internet address for GSA Advantage! is <http://www.GSAAdvantage.gov>.

February 10, 2015

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Milliman.com

**Authorized Federal Supply Schedule  
Price List and Catalog**

| MILLIMAN                             |   |
|--------------------------------------|---|
| FSC Group:                           | 520   |
| Contract Period:                     | December 18, 2014 to December 17, 2019                  |
| Contractor's name:                   | Milliman, Inc.  |
| Contractor's address:                | 15800 Bluemound Road, Suite 100<br>Brookfield, WI 53005 |
| Contractor's Phone Number:           | 301-977-8226  |
| Contractor's Fax Number:             | 262-923-3686  |
| Contractor's Web Site:               | www.milliman.com/mortgage                               |
| Contact for Contract Administration: | Madeline Johnson-Oler, CMB                              |
| Business Size:                       | Large   |
| Supplement Number:                   | 1   |
| Date:                                | January 30, 2015  |

**Prices Shown Here are Net (discount deducted).**

For more information on ordering from Federal Supply Schedules click on the FSS Schedules button at <http://www.fss.gsa.gov>.

**Customer Information Page**

1a. Table of Awarded Special Item Numbers (SINs)

| <b>SIN</b> | <b>DESCRIPTION</b>                          |
|------------|---|
| 520 13     | Complementary Financial Management Services |
| 520 17     | Risk Assessment and Mitigation Services     |

1b. Lowest priced model number and price for each SIN: Not Applicable

1c. Hourly Rates:

| SIN            | Service Proposed               | GSA Rate |
|----------------|--------------------------------|----------|
| 520 13; 520 17 | Principal Financial Consultant | \$459.66 |
| 520 13; 520 17 | Executive Financial Consultant | \$275.65 |
| 520 13; 520 17 | Project Manager                | \$275.65 |
| 520 13; 520 17 | Financial Consultant I         | \$275.65 |
| 520 13; 520 17 | Financial Consultant II        | \$249.81 |
| 520 13; 520 17 | Financial Consultant III       | \$180.90 |
| 520 13; 520 17 | Financial Consulting Actuary   | \$202.44 |
| 520 13; 520 17 | Financial Associate Actuary    | \$193.82 |
| 520 13; 520 17 | Actuarial Student              | \$176.59 |
| 520 13; 520 17 | Senior Programmer              | \$254.12 |
| 520 13; 520 17 | Programmer                     | \$176.59 |
| 520 13; 520 17 | Technician                     | \$163.67 |
| 520 13; 520 17 | Admin                          | \$137.83 |

2. Maximum Order: \$1,000,000.00

\* Ordering activities may request a price reduction at any time before placing an order, establishing a BPA, or in conjunction with the annual BPA review. However, the ordering activity shall seek a price reduction when the order or BPA exceeds the simplified acquisition threshold. Schedule contractors are not required to pass on to all schedule users a price reduction extended only to an individual ordering activity for a specific order or BPA.

3. Minimum Order: \$100.00

4. Geographic Coverage (delivery area): Domestic Delivery Only

48 contiguous states, Alaska, Hawaii, Washington D.C., Puerto Rico, U.S. Territories, and to a port or consolidation point within the aforementioned locations for orders that are received from overseas activities.

5. Point of Production: 15800 W Bluemound Road, Suite 100  
Brookfield, WI 53005

|        |   |  |
|--------|---|--|
| 6.     | Discount from list prices or statement of net price:  | Prices shown are GSA Net, discount deducted.   |
| 7.     | Quantity Discounts:   | Not Applicable   |
| 8.     | Prompt payment terms:   | Net 30 days  |
| 9.(a)  | Notification that Government purchase cards are accepted at or below the micro-purchase threshold:              | Yes  |
| 9.(b)  | Notification whether Government purchase cards are accepted or not accepted above the micro-purchase threshold: | Yes  |
| 10.    | Foreign items:  | Not Applicable   |
| 11.(a) | Time of delivery:   | Negotiated at the task order level   |
| 11.(b) | Expedited delivery:   | Contact contractor   |
| 11.(c) | Overnight and 2-day delivery:   | Contact contractor   |
| 11.(d) | Urgent requirements:  | Agencies can contact the Contractor's representative to affect a faster delivery. Customers are encouraged to contact the contractor for the purpose of requesting accelerated delivery. |
| 12.    | F.O.B. point(s):  | Not applicable   |
| 13.(a) | Ordering address(es):   | Milliman, Inc.<br>15800 W Bluemound Road, Suite 100<br>Brookfield, WI 53005  |
| 13.(b) | Ordering procedures:  | For supplies and services, the ordering procedures, information on blanket purchase agreements (BPA's), and a sample BPA can be found at Federal Acquisition Regulation (FAR) 8.405-3    |
| 14.    | Payment Address:  | 15800 W Bluemound Rd Suite 100,<br>Brookfield, WI 53005  |
| 15.    | Warranty provision:   | SCW  |
| 16.    | Export packing charges:   | Not applicable   |
| 17.    | Terms and conditions of Government purchase card acceptance (any thresholds above the micro-purchase level):    | Not applicable   |

|        |   |                |
|--------|---|----------------|
| 18.    | Terms and conditions of rental maintenance, and repair:   | Not applicable |
| 19.    | Terms and conditions of installation:                     | Not applicable |
| 20.    | Terms and conditions of repair parts:                     | Not applicable |
| 20.(a) | Terms and conditions for any other services:              | Not applicable |
| 21.    | List of service and distribution points:                  | Not applicable |
| 22.    | List of participating dealers:                            | Not applicable |
| 23.    | Preventative maintenance:                                 | Not applicable |
| 24.(a) | Special attributes such as environmental attributes:      | Not applicable |
| 24.(b) | Section 508 Compliance for EIT:                           | Not applicable |
| 25.    | Data Universal Number System (DUNS) number:               | 040784274      |
| 26.    | Contractor has an active registration in the SAM database |                |

## **SIN 520-13: COMPLEMENTARY FINANCIAL MANAGEMENT SERVICES**

### **SIN 520-17: RISK ASSESSMENT AND MITIGATION SERVICES**

#### **Introduction to Milliman**

**Milliman, Inc.** is among the world's largest independent actuarial and consulting firms. Founded in 1947 and incorporated in 1957, Milliman has offices in principal cities worldwide. The firm serves the full spectrum of commercial and governmental organizations.

Milliman's Credit Risk Practice has offices in Milwaukee, WI and Washington, DC that specialize in building customized and cost-effective solutions to measure and manage the unique risks associated with originating credit risk such as mortgage, small business and student loans, providing credit enhancement and risk share analytics, and targeting servicing efficiencies. Milliman provides risk management support through model development and/or validation for a variety of events related to loan credit risk exposure and through operational risk assessments in the loan credit origination process.

Our team of knowledgeable professionals—with a broad spectrum of backgrounds in banking, actuarial science, economics, insurance, and technology—is specifically dedicated to analyzing credit risk, and our knowledge of the industry is unparalleled. We adapt our models and solutions not only to reflect current conditions but also to forecast the future. With our suite of services, our clients are better positioned to address today's challenges and to capitalize on opportunities.

We are different from our competitors in that we are dedicated to ensuring our clients both understand and are able to interpret model output. Where appropriate, we present the results of our work product to all interested parties including government agencies, boards of directors, risk committees, regulators, rating agencies, and investors. The core competencies of our practice complement the critical areas of subject matter expertise required to develop sophisticated risk and performance evaluation dashboards. We understand that the Federal government agencies face challenges which can be quite different than those faced by other organizations. They must manage and deliver a broad-range of services in a fast-paced and highly-visible environment.

Milliman's reputation for quality is unchallenged. Milliman has a strong ethic of peer review that is employed in all projects. This process requires a secondary review of the work performed, reports prepared, and overall project management. In addition, Milliman periodically audits each of its offices to ensure the continued adherence to our quality control standards and professional guidelines. Milliman is an independent party and is well respected in the financial services community as producing quality work without biases. Our consultants bring knowledge, experience and an unbiased perspective to each assignment.

Our services provide true third-party independence and impartiality that facilitates a critical and unconventional assessment of issues and opportunities. We provide industry leading standards for documentation and transparency of work product while maintaining secure data center and GLB compliance. Combining technical prowess with broad-based business expertise, we develop solutions that are practical and actionable—and customized for your agency's needs. The professionals at Milliman are poised to help governmental agencies deliver successful results in analyzing risk, policy development and impact analysis.

## Strengths in the Industry

### *Credit Risk Analysis*

As an independent consulting firm specializing in credit risk analysis and risk management techniques, Milliman assists many clients in developing analytical models to assess the credit risk elements of their operations. Milliman is well positioned to develop such models, through its diverse and specialized expertise in a number of areas including:

- Credit risk management;
- Financial guaranty;
- Mortgage banking and mortgage insurance;
- Small business loans;
- Student loans;
- Structured finance;
- Monte Carlo simulation techniques; and
- Systems programming.

Milliman's credit risk assessment tools assist in the transformation of data and information into shared knowledge. This is accomplished by utilizing statistical and actuarial principles to take complex data and simplifying it to informative and actionable results. Milliman's analyses have been utilized by financial regulators, corporate boards and other oversight groups.

Milliman has unparalleled expertise in credit risk analysis of mortgage insurance, student and small business loans. We have expertise in the evaluation of loan underwriting guidelines; borrower, property, product and market risk. Milliman's analysis of credit and risk-based structures includes evaluating pricing rules and developing scorecards for execution and sale. Milliman is also well versed in loan servicing, loss mitigation strategies, loan repurchase and modification analyses.

### *Predictive Modeling*

Milliman consultants combine risk and financial expertise in such areas as pricing, underwriting, claims, marketing and sales with experience and knowledge of the predictive modeling process. Our Milwaukee Practice uses predictive analytics in a wide-variety of circumstances. We have a core team of programmers who use predictive analytics to help clients with pricing, loss performance and fraud or defect identification in lending applications. Further, we understand the needs of the Federal Government to evaluate risks associated with financial services products such as direct loans and insurance.

Our modeling services and products include: Model Validation, Repurchase and Loan Loss Reserve Model, Credit Default Score, Quality Control Score, Fair lending/ HMDA,

### *Model Validation*

Mathematical models are frequently used by financial institutions to analyze potential business opportunities and risks. Once confined to a small corner of analysis, models are now increasingly used in: estimating economic capital; quantifying exposures to assets/liabilities; setting risk tolerances based on VAR limits, concentration limits, ROI/ROE, or developing risk-based pricing structures for premium rates, loan pricing, or loan scoring. An effective model validation would review the original purpose of the model and current uses to highlight any potential risks or limitations using the model. Our team of model validation experts can review the range of model responses as well as the number and magnitude of stressful events in the data. Our review is to identify potential limitations of the model and to help managers develop an understanding of these limitations on the model's estimates.

### ***Unstructured Data Analysis***

Milliman has expertise in data mining and making use out of unstructured data. Our Milwaukee Practice has developed an online application that incorporates powerful data-mining algorithms along with a robust data warehouse environment to provide clients with the tools necessary to better manage their costs. Milliman Teams each have extensive internal resources which facilitate efficient implementation of large-scale, diverse data management assignments.

Our approach focuses on transforming information into insights by: (a) applying meta data and rules (e.g., data cleaning logic, smoothing, missing value imputation), (b) building predictive models that lead to improved fact-based decisions for all facets of the real estate industry and beyond and (c) delivering results in flexible and practical outputs, often using data visualization tools.

Milliman provides expertise in data analytics and management, predictive modeling and data mining that can fulfill the needs of our clients with respect to actuarial analyses for financial solvency, pricing assessments and profitability studies, as well as other model validations and evaluation tools.

### **Other Consulting Services**

#### ***Stochastic Modeling***

Milliman takes advantage of computing power and enhanced modeling techniques to deliver improved insight into your fundamental business risks, including longevity, mortality, and lapse. Using sophisticated stochastic methods, we can not only identify the expected returns on a portfolio of complex risks, but also better understand and manage the volatility of these returns.

Coupled with rapidly evolving demographics in many of our markets, new stochastic techniques allow our clients to develop new products and fine-tune the financial management of associated risk.

#### ***Enterprise Risk Management***

Milliman helps clients create a corporate risk framework to align various functions and bring together strategic business units from across the organization. We help embed effective risk management processes and practices throughout an organization through communication of its importance as well as promotion of consistent adoption and use.

Market and credit risks are only two components of enterprise risk management. Companies also need to consider strategic and operational risks, which can be far more elusive - and equally adverse. These risks often involve interactions among people, systems, and the external environment making them much harder to quantify.

Milliman has developed a proprietary methodology to help companies identify and manage potential threats and opportunities and understand their risk profiles relative to corporate objectives. This methodology gives clients a more sophisticated understanding of their full risk profiles, improving their abilities to manage their greatest challenges.

#### ***Financial Technology Software***

Milliman has played an active role in the evolution of the insurance industry. We have the experience required to deliver insight into emerging trends in the context of your specific business dynamics. Supported by expert analysis, we offer focused advice on corporate strategy, risk management, product offerings, distribution, and other key areas.

Milliman’s sophisticated software tools reflect the most advanced financial technology. In an era of changing standards and law, our consultants provide the industry’s latest products and the know-how to use them to address the risks you face. Used by leading insurance and financial firms worldwide, Milliman software supports essential risk-management and reporting functions, from hedging through projections, pricing, reserving, and analysis of capital needs.

Milliman consultants bring knowledge, experience, and an unbiased perspective. Combining technical prowess with broad-based business expertise, we develop solutions that are practical and actionable—and customized for your organization’s needs.

### ***Financial Reporting and Analysis***

As financial reporting standards evolve, Milliman clients benefit from our broad knowledge of current best practices and insight on emerging issues. We support you with practical advice and advanced tools to ensure the most accurate and efficient reporting process. We can review your existing methods and suggest improvements or create tailored financial reporting systems. We can perform all calculations for you or train your actuaries to use the customized tools we develop. For some clients, we serve as appointed actuaries.

## **LABOR DESCRIPTION CATEGORIES**

| <b>Labor Category</b>          | <b>Position Description and Functional Responsibilities</b>   | <b>Minimum Years of Experience</b> | <b>Minimum Years of Education or Equivalent Experience</b>   | <b>Applicable Training</b>                          |
|--------------------------------|---|------------------------------------|--|---|
| Principal Financial Consultant | Principal of the firm with more than fifteen years of experience. Functional responsibilities include general oversight, staffing the project, providing guidance to project managers, and project review. Consulting services include providing expert advice, strategic direction for the project, subject matter expertise, and delivering results to clients. | >15 years                          | MBA, PhD or Fellow in the Casualty Actuarial Society, Society of Actuaries, or other professional actuarial organization | Financial, Project Management, Executive management |
| Executive Financial Consultant | Senior level consultant with more than fifteen years of financial services experience. Staff member offers extensive specialized experience in the area of the practice. Functional responsibilities include project management and oversight, high level analyses, and project review. Consulting  | >15 years                          | MBA, PhD or Fellow in the Casualty Actuarial Society, Society of Actuaries, or other professional actuarial organization | Financial, Project Management, Executive management |

| Labor Category         | Position Description and Functional Responsibilities   | Minimum Years of Experience | Minimum Years of Education or Equivalent Experience  | Applicable Training   |
|------------------------|--|-----------------------------|--|---|
|                        | services include providing expert advice, assistance and guidance on technical and operational issues, subject matter expert in lending and risk management practice, and delivering results to clients.   |                             |  |   |
| Project Manager        | Consultant of the firm with at least five years of experience who has demonstrated an ability within the firm to manage client engagements. Functional responsibilities include client engagement responsibility including staffing the project, project management and oversight, financial analysis, and engagement review. Consulting services include providing expert advice, assistance and guidance on technical and operational issues, statistical analyses, and delivering results to clients. | >5 years                    | MBA, PhD or Fellow in the Casualty Actuarial Society, Society of Actuaries, or other professional actuarial organization | Financial, Engagement Management, Project Management, Sales and Marketing of Products and Services, Signature Authority |
| Financial Consultant I | Consultant of the firm with at least five years of experience who has demonstrated an ability within the firm to manage client projects. Functional responsibilities include project management responsibility including staffing, financial analysis, and project review. Consulting services include providing expert advice, assistance and guidance on technical and operational issues, statistical analyses, and delivering results to clients.  | >5 years                    | BA, BS, MBA or other professional certification (CFA, CMB, etc.)   | Project Management  |

| Labor Category               | Position Description and Functional Responsibilities   | Minimum Years of Experience | Minimum Years of Education or Equivalent Experience   | Applicable Training    |
|------------------------------|--|-----------------------------|---|------------------------|
| Financial Consultant II      | Consultant of the firm with more than five years of experience. Consultant offers specialized experience in financial and credit analysis. Functional responsibilities include financial analyses and management of junior staff. Consulting services include providing advice, assistance and guidance on technical and operational issues, and statistical analyses.   | >5 years                    | BS/BA   | Financial or Actuarial |
| Financial Consultant III     | Staff of the firm with one or more years of experience. Functional responsibilities include financial or statistical analyses, data collection, and research under the direction of senior staff.  | 1 or more years             | BS/BA   | Financial or Actuarial |
| Financial Consulting Actuary | Consultant with more than five years of applicable experience and who have reached Fellowship Level as defined by the Casualty Actuarial Society or the Society of Actuaries. Staff member offers extensive specialized experience in financial and credit analysis. Functional responsibilities include project oversight, financial or statistical analyses, and project review. Consulting services include providing expert advice, assistance and guidance on technical and operational issues, and statistical analyses. | > 5 years                   | Fellow or Associate in the Casualty Actuarial Society, Society of Actuaries, or other professional actuarial organization | Actuarial              |

| Labor Category              | Position Description and Functional Responsibilities   | Minimum Years of Experience | Minimum Years of Education or Equivalent Experience   | Applicable Training |
|-----------------------------|--|-----------------------------|---|---------------------|
| Financial Associate Actuary | Staff with more than five years of applicable experience who have reached Associate Level as defined by the Casualty Actuarial Society or the Society of Actuaries. Functional responsibilities include actuarial and statistical analyses, model development, and review of work performed by others.                     | >5 years                    | Associate in the Casualty Actuarial Society, Society of Actuaries, or other professional actuarial organization | Actuarial           |
| Actuarial Student           | Staff with one or more years of applicable experience that is currently taking actuarial exams but has not reach Associated Level as defined by the Casualty Actuarial Society or Society of Actuaries. Functional responsibilities include analyses, research, and model development under the direction of senior staff. | > 1 year                    | BS/BA   | Actuarial           |
| Senior Programmer           | Information systems specialist with greater than 5 years of applicable experience. Functional responsibilities include programming, data management, and providing guidance to junior programmers.   | >5 years                    | BS/BA degree in computer science, applied math, or related field, or equivalent work experience                 | Info systems        |
| Programmer                  | Information systems specialist. Functional responsibilities include programming, data management, and providing technical assistance team members.   | >1 year                     | BS/BA degree in computer science, applied math, or related field, or equivalent work experience                 | Info systems        |
| Technician                  | Staff with one or more years of applicable experience who are not taking actuarial exams. Functional responsibilities include analyses, research, and model development under the direction of senior staff.   | 1 year                      | BS/BA   | None                |
| Admin                       | Administrative staff with general business skills.   | 1 year                      | no minimum  | None                |