

March 24, 2008

### Contents

A.M. Best Rating Policy. . . . .	1
A.M. Best's Analytical Approach . . . . .	5
Evaluating the Credit Risk of the Securities. . . . .	19
Surveillance Requirements for Transactions . . . . .	25
Appendix: Determining the Final Mortality Matrix . . . . .	26

### Related Reports

#### Methodology:

Best's Idealized Default Matrix

#### Methodology:

Best's Impairment Rate and  
Rating Transition Study

### Rating Analyst

Emmanuel Modu, Managing Director &  
Global Head of Structured Finance  
+1 (908) 439-2200 Ext. 5356  
Emmanuel.Modu@ambest.com

This methodology is available at  
[www.ambest.com/ratings/methodology](http://www.ambest.com/ratings/methodology)

## Life Settlement Securitization

A life settlement is an insurance policy sold by the owner — typically the insured or a trust — for an amount greater than the surrender value of the policy but lower than the face amount of the policy. The purchaser of the life settlement becomes the new owner and beneficiary of the life insurance policy and is responsible for making future premium payments and collecting the death benefit of the insured. **Exhibit 1** lists some of the reasons to sell an insurance policy.

The life settlement market is an outgrowth of the viatical settlement market, in which policies of the terminally ill — normally those insureds expected to die within two years — are bought and sold. In the life settlement market, however, insureds generally are 65 years or older, with medical impairments resulting in life expectancies of about three to 15 years.

Life settlements typically are sold through licensed providers by insurance brokers and agents. The price providers pay for the life settlements depends generally on the life expectancies estimated by medical examiners after evaluating the medical records of the insured, as well as policy-specific contract characteristics. The more severe the chronic illness of an insured, the lower the life expectancy and, hence, the higher the price paid for the life settlement.

Life settlement securitization has generated a lot of interest in the capital markets. Indeed, some financial institutions have been financing the accumulation of life settlement portfolios that they hope to securitize. The growth of life settlement securitization will depend on: increased clarity and standardization of the general methods for predicting life expectancies of insureds (including release of data on the performance of medical examiners); the transparency of the pricing of life settlements; the transparency of the fees earned by the various intermediaries in the transactions; the extent to which the life settlement industry provides safeguards regarding the identities, health conditions and financial status of policyowners; effective industry regulatory oversight and self-policing; the establishment of rating agency standards for assessing the credit risks associated with such transactions; and the pace of the emergence of new initiatives supported by the life insurance industry to provide alternatives to the secondary market for life insurance policies.

This document outlines A.M. Best Co.'s considerations in rating securities backed by life settlements. **Exhibits 2** and **3** describe and illustrate the parties involved in typical life settlement securitization transactions.

## A.M. Best Rating Policy

### Analysis Based on a Newly Acquired Portfolio of Life Settlements

The acquisition of new life settlements for securitizations is fraught with uncertainties: the extent to which the seller of the insurance policies has established insurable interest in the lives of the insureds; the price of the life settlements; the estimated life expectancies of the individuals who sell their insurance policies;



the availability of an ample pool of policies to satisfy the requirement for the transaction; the extent to which the various intermediaries involved in facilitating the sale of insurance policies have adhered to legal and regulatory requirements; and other factors that can make building a suitable life settlement portfolio challenging. Due to these uncertainties, A.M. Best issues three types of evaluations for securities backed by life settlements: 1) a Preliminary Assessment, 2) an Indicative Rating and 3) a Long-Term Debt Rating (Debt Rating). These analyses represent increasing levels of certainty associated with the transaction, as further described below.

### 1. Preliminary Assessment

A Preliminary Assessment is issued to securities that are to be backed by a projected portfolio of life settlements that will be purchased over a specified period. Since the securities and the life settlement portfolio do not yet exist, the Preliminary Assessment is given only if the issuer (i.e. the bankruptcy-remote entity issuing the securities in the transaction) indicates to A.M. Best that it intends eventually to acquire a Debt Rating on securities backed by in-place life settlement collateral. To qualify for a Preliminary Assessment, all the major factors of the transaction must be specified, such as the:

- Providers of the life settlements;
- Policy accumulation period;
- Features of the securities contemplated for issuance;
- Features of each life settlement to be acquired for the transaction;
- Reserve amount and/or liquidity facility (if any);

- Stop-loss provisions (if any);
- The legal maturity of the transaction;
- The transaction's "waterfall";
- Overcollateralization or debt coverage triggers (if any) contemplated for the transaction;
- The term sheet for the transaction; and
- Other significant parameters and requirements fully described in this methodology.

The Preliminary Assessment is valid only at the time of issue; is not updated (unless the issuer explicitly requests an update); and is communicated to the issuer via a private letter.

## Exhibit 1 Reasons to Sell an Insurance Policy

- Premiums paid by the policyholder have become unaffordable and the policy is in danger of lapsing;
- Estate-planning needs of the insured have changed significantly;
- Funds are needed for long-term health care;
- Beneficiary has changed because of death or divorce;
- Disposal of unneeded "key-man" insurance or other business-owned insurance;
- Fund new annuities, life insurance or investments;
- Satisfy the need for cash in a forced liquidation due to bankruptcy or financial difficulties;
- Liquidate policies donated to not-for-profits; or
- Dispose of policies that no longer are needed or wanted for a variety of other reasons.

## A.M. Best Company Methodology

PUBLISHER, PRESIDENT AND CHAIRMAN  
**Arthur Snyder**

EXECUTIVE VICE PRESIDENT/CHIEF OPERATING OFFICER  
**Arthur Snyder III**

EXECUTIVE VICE PRESIDENT/CHIEF RATING OFFICER  
**Larry G. Mayewski**

EXECUTIVE VICE PRESIDENT/CHIEF INFORMATION OFFICER  
**Paul C. Tinnirello**

SENIOR VICE PRESIDENTS

**Manfred Nowacki**, Life/Health  
**Matthew Mosher**, Property/Casualty  
**Rita L. Tedesco**, Information Services

ANALYTICAL SERVICES GROUP

**John Lafayette**, Assistant Vice President  
**Carole Ann King**, Assistant Manager  
**Stephen Brown Klinger**, Senior Business Analyst  
**Joe Niedzielski**, Senior Business Analyst  
**Brendan Noonan**, Senior Business Analyst  
**Laura McArdle**, Business Analyst  
**Jey Thanapal**, Business Analyst  
**Thomas Dawson IV**, Associate Editor

PRODUCTION

**Jenica Thomas**, Designer

Copyright © 2008 by A.M. Best Company, Inc., Ambest Road, Oldwick, New Jersey 08858. ALL RIGHTS RESERVED. No part of this report or document may be distributed in any electronic form or by any means, or stored in a database or retrieval system, without the prior written permission of the A.M. Best Company. For additional details, see Terms of Use available at the A.M. Best Company Web site [www.ambest.com](http://www.ambest.com).

Best's Ratings reflect the A.M. Best Company's opinion based on a comprehensive quantitative and qualitative evaluation of a company's balance sheet strength, operating performance and business profile and, where appropriate, the specific nature and details of a rated debt security. These ratings are not a warranty of an insurer's current or future ability to meet its contractual obligations, nor are they a recommendation to buy, sell or hold any security. Further, any and all information herein is provided "as is," without warranty of any kind, expressed or implied. A.M. Best Company receives compensation for its interactive financial strength ratings, from the insurance companies it rates. In compliance with the Securities Act of 1933, A.M. Best also discloses that it receives rating fees from most issuers of the debt securities it rates. Those fees fall within a range of \$7,500 to \$500,000.

Copies are available through Customer Service: (908) 439-2200, Ext. 5577. The report is also available online at [www.ambest.com/ratings/methodology.html](http://www.ambest.com/ratings/methodology.html).

For press inquiries or to contact the authors, please contact James Peavy at (908) 439-2200, ext. 5644.



## 2. Indicative Rating

An Indicative Rating, in the context of life settlement-backed securities, can only be sought by the issuer once it has purchased at least 80% of the life settlements targeted for the transaction. The Indicative Rating, which is a public rating, reflects the specific attributes of the purchased life

settlements, as well as the life settlements targeted to fully ramp up the portfolio. Even though the transaction has not yet been fully completed, the Indicative Rating is given to the securities to give investors an indication of the current credit quality of the securities. A.M. Best requires a draft of the indenture or offering memorandum from the attorneys engaged by the issuer.

### Exhibit 2

## Parties Involved in Life Settlement Securitizations

**The Issuer** — The issuer normally is a bankruptcy-remote entity established for the sole purpose of purchasing life settlements; issuing securities collateralized by life settlements; and holding other assets for the sole purpose of servicing the interests of the noteholders. The responsibility of the issuer is outlined in the indenture of the transaction.

**The Providers** — Providers are licensed entities that purchase insurance policies directly from sellers or licensed brokers or agents authorized to act for sellers. They are responsible for making sure that all transfer-related documentation and sale documentation packages conform to applicable state or federal statutes, laws, rules and regulations relating to consumer protection and insurance and life settlement practices and procedures. Providers present policies to the issuer pursuant to an origination agreement.

**Medical Examiners** — Medical examiners provide comprehensive reviews of medical records and mortality profiles on the insureds looking to sell their insurance policies. The mortality profile provided by the medical examiners includes a summary of pertinent medical conditions as well as a determination of life expectancy. The issuer requires providers to engage the services of at least two independent medical examiners to evaluate the life expectancies of the insureds.

**Adviser for Inconsistency** — This adviser performs “Inconsistency Checks” verifying that medical records are consistent with the original insurance applications. Medical examiners sometimes can provide this service.

**Collateral Manager** — The collateral manager is responsible for choosing the policies that will be included in the transactions. This manager’s specific responsibilities may include: confirming that the eligibility criteria for inclusion in a portfolio are satisfied; performing policy optimization to minimize premium payments and maximize death benefits; delivering the sales documentation package to the trustee; liquidating policies when necessary; determining which policies should lapse in the event of a liquidity crisis; and determining how much to reduce death benefits in order to reduce premium payments in a liquidity crisis.

**Tracking Agent** — The tracking agent is responsible for contacting the insureds or their representatives to verify the current life/death status of the insureds. The tracking agent normally uses methods similar to those developed for consumer loan servicing such as accessing databases for the insured’s marital status, residence and physicians’ visits and matching Social Security numbers to deaths of individuals. In addition, the tracking agent is responsible for obtaining copies of death certificates (and sometimes, filing the death claim with the insurance company) to facilitate the prompt collection of death benefits.

**Trustee** — The trustee performs all the duties it is assigned in the transaction’s indenture. In general, the trustee is responsible for holding the bonds/notes for the benefit of the noteholders; for holding the security granted by the issuer over its assets; and for making payments and performing certain other obligations pursuant to the indenture. The trustee also holds all documents delivered to the issuer in connection with each life settlement. In addition, the trustee performs certain duties related to documenting life insurance policy acquisitions, fund transfers and submission of claims for payment under life insurance policies on the instructions of the collateral manager.

**Actuaries** — Actuaries can play an important role by helping to determine the appropriate mortality tables for the transaction; assessing the reasonability of the mortality/survivorship schedule provided by medical examiners; performing an underwriting review of the medical examiners used in the transaction; and helping the issuer determine the liquidation value of life settlements.

**Insurance Companies** — The insurance companies that issued the life insurance policies in the transaction are critical, because they must be notified of the transfer of the policy’s ownership, they can provide policy illustrations to help with policy optimization, and they are responsible for sending notices to the issuer about the policies and for sending the death benefits to the issuer.

**Attorneys** — Attorneys can help ensure that all documentation is complete and has been prepared in compliance with state insurance regulations, and that the integrity of the insurable interest doctrine is maintained. They also may provide comfort letters to verify the states in which providers are licensed, and they can help craft medical disclosure forms to comply with applicable privacy laws. In addition, attorneys ensure that the bankruptcy-remote entities from which the securities are issued have been created so as to protect the assets of such security holders.

**Accountants/Auditors** — Accountants can provide opinions about (1) the recognition of income and expenses in the bankruptcy-remote entity’s country of domicile; (2) the tax implications, if any, of acquiring life settlements by the entity; (3) any special tax treatment/implications associated with the disposal of life settlements; and (4) identification of any tax withholding requirements that might be applicable to the entity. Auditors periodically provide opinions on the integrity of the balance sheet and income statement of the bankruptcy-remote entity.

In addition, all essential elements of the transaction must be in place, such as the:

- Providers of the life settlements;
- Tracking agent;
- Collateral manager;
- Features of the securities being issued;
- Features of the life settlements that have been acquired and projections of the features and timing of the life settlements to be acquired to complete the ramp-up;
- Formation of the bankruptcy-remote vehicle that will issue the securities;
- Two designated medical examiners;
- Underwriting review of the medical examiners and their operations;
- Actual and projected prices of life settlements;
- Actual and projected life expectancies;
- Actual and projected premiums of the policies;
- Reserve amount and/or liquidity facility (if any);
- The transaction’s “waterfall”;
- Stop-loss provisions (if any);
- Overcollateralization or debt coverage triggers (if any);
- All legal documents, at least in draft form; and

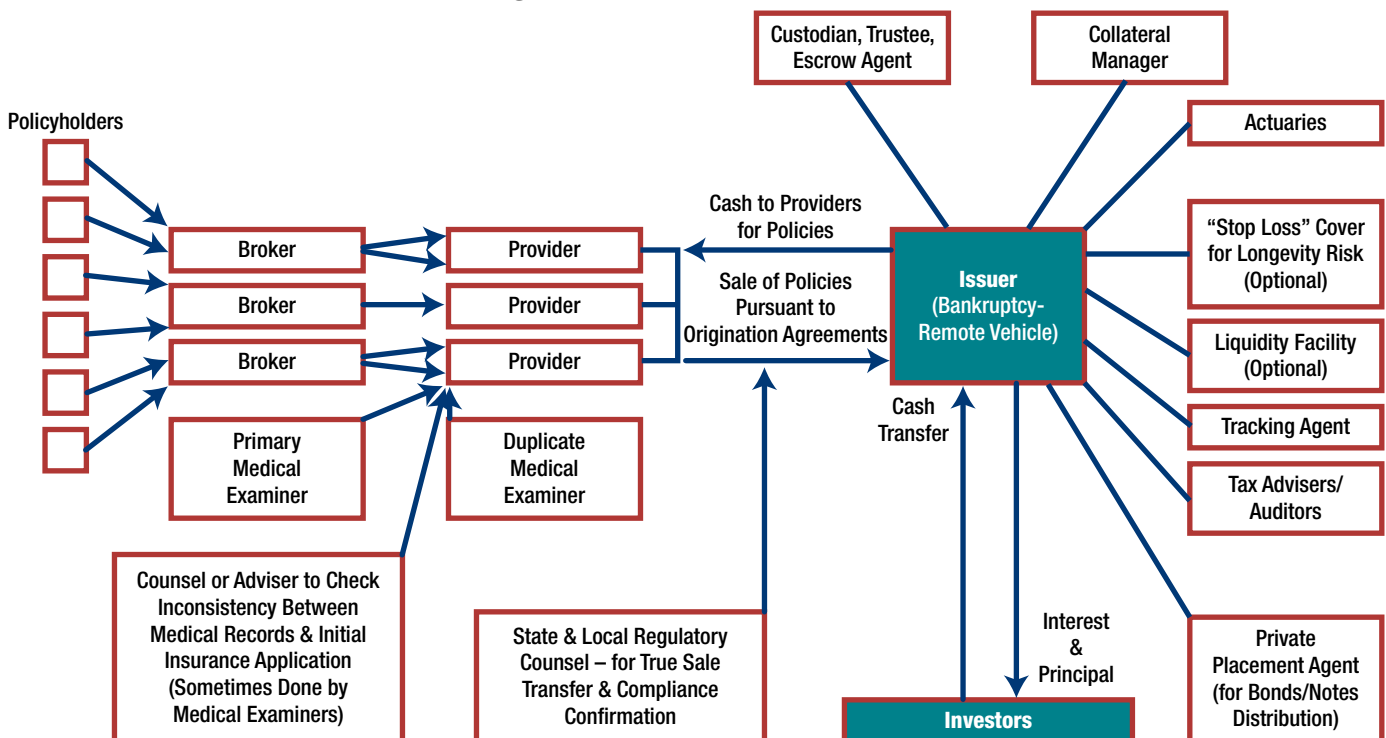
- Other significant parameters and requirements as fully described in this methodology.

### 3. Long-Term Debt Rating (Debt Rating)

An issuer seeking a Debt Rating must have acquired 100% of the life settlements necessary for the transaction and met all the conditions outlined for the Indicative Rating. If an Indicative Rating was issued to the securities, that rating is replaced by a Debt Rating upon completion of the ramp-up and finalization of all legal documents. The Debt Rating is a public rating.

It is not necessary for the issuer to seek the Preliminary Assessment or an Indicative Rating before seeking a Debt Rating. For example, an issuer that already has accumulated or purchased a portfolio of life settlements could seek a Debt Rating without seeking either a Preliminary Assessment or an Indicative Rating before seeking a Debt Rating. For example, an issuer that already has accumulated or purchased a portfolio of life settlements could seek a Debt Rating without seeking either a Preliminary Assessment

Exhibit 3  
Life Settlement Securitization Diagram



or an Indicative Rating before seeking a Debt Rating. For example, an issuer that already has accumulated or purchased a portfolio

of life settlements could seek a Debt Rating without seeking either a Preliminary Assessment or an Indicative Rating.

### **Analyses Based on an Existing Portfolio of Life Settlements**

A.M. Best generally prefers to rate securities backed by new life settlements that have been purchased policy by policy over a period of about 12 to 18 months or less. In fact, this methodology focuses on such “home-grown” portfolios of life settlements. However, A.M. Best is aware that from time to time, portfolios of life settlements are made available for sale by institutional investors or providers that wish to liquidate their holdings. Acquiring an existing portfolio eliminates the ramp-up period, which can be extensive for life settlement transactions, and may mitigate some of the other uncertainties associated with purchasing policies over time. Buyers of existing portfolios, however, run the risk of inheriting the legal and regulatory risks inherent in the manner in which the portfolios were originated.

A.M. Best, under certain situations, may make its decision on whether to rate securities collateralized by an existing portfolio based on various factors including (but not limited to): the original life settlement eligibility criteria; the medical examiners used and the availability of any and all life expectancy projections on the lives in the portfolio; when the medical examiner determined the life expectancies of the lives in the portfolio; the ease of the legal transfer of the portfolio to the issuer; the availability of the data needed for surveillance of the transaction (as described in the last section of this document); proven historical mortality experience of the portfolio; and the availability of legal opinions verifying adherence to insurable interest laws.

## **A.M. Best’s Analytical Approach**

### **Evaluating Life Settlement-Backed Securities**

The A.M. Best Structured Finance Group is responsible for rating securities collateralized by life settlements. The mortality profiles of the insureds, as provided by reputable medical examiners, are used in simulating the maturities in the entire life settlement portfolio. In addition, the probabilities of impairment of the insurance companies and the assumed recoveries are applied to the transaction. These factors, along with the price of each life settlement, the premium for each policy and the projected increases

in premium (if any) in the event the insureds live longer than expected are considered in arriving at the cash flows that will service the securities. The end result of A.M. Best’s analysis is a determination of the default probability of the securities, which then is correlated to an idealized default probability matrix. This process, in conjunction with meeting various stress scenarios and qualitative considerations, helps establish the credit rating on the securities based on A.M. Best’s credit market scale.

### **Rating Considerations and Requirements**

#### ***1. Types of Policies Permitted/Conditions on Policies***

Issuers of securities backed by life settlements can include life insurance policies most commonly found in life settlement transactions, such as: universal life, variable universal life, whole life, variable whole life, term life, joint survivorship and group policies. A.M. Best also allows term policies that are convertible or exchangeable to permanent policies without a new medical evaluation and without a new contestability or suicide provision. The anticipated maximum increase in premi-

ums at the time of conversion or exchange must be disclosed. Term policies that are neither convertible nor exchangeable are allowed in the transaction only if the term of the policy is at least 2.5 times the life expectancy of the insured. There is, however, a 10% limit on the number of lives covered by term policies in the pool and a 10% limit on the aggregate face value of the term policies in the pool. Since group policies are subject to the risk that the sponsoring employer, union or association will become insolvent, A.M. Best allows only convertible group policies in the collateral pool.

The general rules related to the features of the insurance policies in life settlement securitizations are:

- Only policies issued by U.S. insurance companies on U.S. residents are allowed;
- Assignment of the policy to another party should not be restricted;
- Policies with decreasing death benefits are not allowed;
- Fractional shares of policies generally are not allowed;
- Confirmation is required that the policy is in force and is not within the grace period;
- No restrictions should exist on the payment of the full, current net death benefits in the event of the insured's death, except for nonpayment of the current premiums;
- Confirmation is required that nothing prevents the payment of insurance benefits in one lump sum;
- Verification is required that the policy is not encumbered by any other party; and
- Verification is required that there is no outstanding debt on the policy.

**2. Service Providers**

**A. Medical Examiners**

*A.1 Mortality Ratings and Life Expectancy Estimates*

Medical examiners use a numerical rating system developed by reinsurers to determine how an individual's mortality differs from a "standard" risk. In general, standard risk is given a

value of 100%, which represents a unit of risk. The system assigns debits and credits to a life where debits are factors that increase a person's mortality over a standard risk and credits are factors that decrease a person's mortality over a standard risk. For example, an individual might have coronary heart disease that may be assigned a debit of 150%, and if that person has had bypass surgery to manage the ailment, he or she may earn credits of 25%. When the debits and credits are summed, the person has a net debit balance of 125%. If a standard risk is considered to have a table rating of 100%, then this risk relative to standard will have a rating of 225%. This can be interpreted to mean that the probability that this individual will die is 125% higher than that of a standard risk — i.e. 225% of a standard risk. It is important to recognize that one of the significant tasks a medical examiner has to undertake is to determine what is a standard risk, since the mortality rating is a relative measure of the probability of death, not an absolute measure. Authors Brackenridge, Croxson and Mackenzie put it succinctly in the fifth edition of *Brackenridge's Medical Selection of Life Risks*:

*The underwriting of substandard lives uses comparative mortality to judge substandard risks. Simply put, in order for a condition to be viewed as substandard, mortality observed among those people having the condition, must be greater than the mortality otherwise expected. And in order to know what mortality to expect, a reference mortality experience must be available.*

No matter the medical examiner, the standard risk class should represent a combination of risks that are substandard as well as risks that are above standard – not just risks of healthy individuals. To arrive at a life expectancy for most lives, the medical underwriter applies the mortality rating to its standard mortality, otherwise known as the "reference mortality experience" in the passage above. Because each medical underwriter uses its own mortality tables and has its own method of determining debits and credits to account for diseases, lifestyle and mortality improvements, it is difficult to derive a mortality curve for an insured unless one knows the specific standard table used by that medical examiner. For this very reason, one who receives a mortality rating from a medical examiner for an insured also should get the corresponding standard mortality

**EXHIBIT 4  
Disease Diversity**

Disease or Category	Examples	Maximum Limits
Cardiovascular	Coronary Artery Disease, Arrhythmia, Other (e.g. Heart Valve Disease)	50%
Cerebrovascular	Stroke, Carotid Artery, Transient Ischemic Attack	20%
Dementia	Alzheimer's, Multi-Infarct	20%
Cancer	Lung, Prostate, Breast, Hematological, All Other Cancers	25%
Diabetes		10%
Respiratory Diseases	Emphysema, Asthma, Sleep Apnea, Chronic Obstructive Pulmonary Disease	20%
Neurological Disorders (Excluding Alzheimer's)	Parkinson's, Lou Gehrig's Disease (ALS)	15%
Other	Renal Failure, Peripheral Vascular, etc.	20%
No Disease		100%
Multiple		40%
HIV/AIDS		0%

table that is used to derive the life expectancy; otherwise, the data set is incomplete for the purposes of analyzing mortality risk. The life settlement industry has surmised that most medical examiners currently use some version of the 2001 VBT as standard — a conclusion that is not entirely wrong. It should be noted that A.M. Best views favorably standard mortality tables that have been created with the help of qualified actuaries — especially those who are familiar with older age mortality patterns.

A medical examiner can provide some or all of the following information: 1) its standard mortality tables upon which debits and credits are applied; 2) a mortality rating (i.e. 100% + net debits and credits) that the medical examiner applies to its base mortality table to derive the life expectancy for each insured; 3) a life expectancy estimate for each insured (including the joint life-expectancy estimates for second-to-die policies); 4) a mortality or survivorship schedule for each insured (given medical impairments); 5) the primary disease category for each insured, if one has been identified; and 6) a report that validates the historical accuracy of the medical examiners' life-expectancy projections (i.e. actual to expected results).

The primary disease is the impairment for which the most debits have been assigned and that accounts for 50% or more of the total debits. If no single impairment accounts for 50% or more of the total debits, then the disease category should be classified as "Multiple." The categorization of diseases will help ensure the disease diversity required in the transaction, as described in Section 5.A. Medical examiners can categorize diseases using the groupings in **Exhibit 4**.

For investors, two of the most important factors in evaluating life settlements are longevity risk and the potential for medical examiners to systematically misestimate life expectancies. A.M. Best has observed that life settlement portfolios accumulated about five years ago or so are beginning to show signs that maturities (i.e. deaths) are not keeping pace with the opinions given by medical examiners when the portfolios originally were formed. A.M. Best also has observed that since the last update of this methodology in September 2005, medical

examiners have been issuing more conservative life expectancies for the lives they have evaluated. For example, in the earlier methodology, about 73% of the life expectancies issued were less than or equal to 144 months. Currently, the life expectancies issued less than or equal to 144 months have narrowed to about 51%. This may reflect more conservative methodologies by medical examiners and/or the possibility that medical examiners are determining life expectancies for healthier people than before.

**Exhibit 5** shows the typical distribution of life expectancies for individuals aged 65 and older, as observed by A.M. Best over the past year. The table shows that A.M. Best expects 10.7% of all life expectancies issued were between 72 months and 96 months, and only 18.4% were less than or equal to 96 months. The table is important because it shows that the highly coveted low life expectancies sought by some investors in life settlements just are not plentiful.

To further illustrate why the supply of short life expectancies is limited, it is useful to observe the life expectancies of a 75-year-old, male nonsmoker — the typical profile of individuals likely to be in a pool of life settlements.

**Exhibit 6** shows the life expectancy of 75-year-olds based on various mortality ratings applied to the 2001 VBT. A 100% mortality rating applied to the 2001 VBT suggests that in the aggregate, the insureds being evaluated die based on the standard pattern established by the table. A 200% mortality

### Exhibit 5 Typical Distribution of Life Expectancies For Ages 65 & Older

Life Expectancy Range (Months)	Frequency Distribution	Cumulative Probability
<=24	0.30%	0.30%
>24 <=48	1.80%	2.10%
>48 <=72	5.60%	7.70%
>72 <=96	10.70%	18.40%
>96 <=120	15.90%	34.30%
>120 <=144	16.70%	51.10%
>144 <=168	16.90%	67.90%
>168 <=192	14.50%	82.40%
>192 <=216	9.60%	92.00%
>216 <=240	5.00%	97.00%
>240 <=264	2.20%	99.20%
>288	0.80%	100.00%

rating suggests that the insureds die at twice the rate of the standard pattern established by the 2001 VBT, and so on. The mortality ratings, therefore, generally indicate the relative severity of diseases ailing the insureds. As shown in **Exhibit 6**, a 75-year-old, male nonsmoker has a normal (unimpaired) life expectancy (based on 100% mortality rating) of about 14 years. The mortality ratings generally issued by medical examiners for the impaired lives of this age, sex and smoking status normally would range from 300% down to 150%, which translates to life expectancies between approximately 8.7 and 11.8 years. To achieve a life expectancy of about seven years or less for this type of individual, the mortality rating would need to be about 460% or more – rare mortality ratings for individuals with the profile under consideration.

While medical examiners, in general, have been issuing higher life expectancies than ever before, data evaluated by A.M. Best still show major differences in the life expectancies issued by various medical examiners on the same lives. A.M. Best compared life expectancies issued by three major medical examiners over the past year on the exact same 909 lives. The ages ranged from 75 to 79, and the male/female split was 66%/34% — the typical ages and gender distribution found in life settlement pools. After calculating the average life expectancies for each of the three medical examiners, the largest difference of average

life expectancies issued by any two medical examiners was 24 months. The smallest difference was eight months.

The differences in life expectancies generally mean that one would arrive at a different price for an insurance policy depending on what medical examiner is used in the price calculation — a lower life expectancy necessarily means a higher price for the policy. In a very competitive marketplace where policies are scarce, some industry intermediaries who buy policies on behalf of the ultimate investors may have an incentive to encourage the use of lower life expectancies for pricing purposes, because it gives them a better chance at winning the bidding contest for the policies and maintaining the internal rate of return (IRR) thresholds set by their clients.

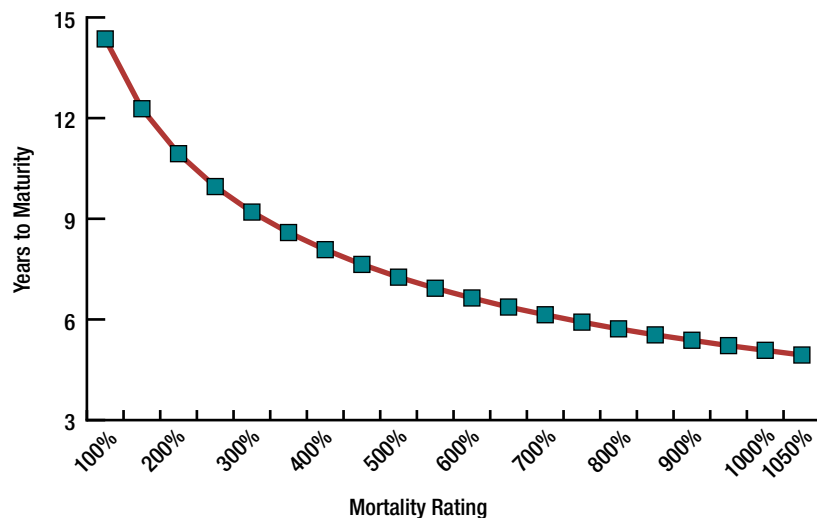
The effect of life expectancy adverse development on a life settlement portfolio’s IRR can be dramatic. **Exhibit 7** shows the IRR of an actual portfolio of about 150 policies with premiums optimized to be equal to the cost of insurance. The IRR calculation incorporates just the cost of the portfolio purchase, the premium payments and the death benefits. The exhibit shows the decrease in IRR as the life expectancy is increased from three months to 36 months. When the aggregate life expectancy is 24 months longer than is projected, the IRR goes from 12.4% to 6.5% – cutting the original IRR nearly in half. Of course, the relationship between life expectancies and IRRs will vary depending on a host of factors, such as the original portfolio life expectancy, the premium schedule and the cost of the portfolio. However, the trend of a dramatically lower IRR as life expectancy increases by more than one year generally will be consistent across portfolios of life settlements.

To mitigate the effect of systematic errors by medical examiners in the determination of life expectancies, A.M. Best generally requires that two independent medical examiners provide an evaluation of the health condition of the insureds in the collateral pool based on the medical records obtained from the primary physicians of the insureds. Of course, this is relevant only if the issuer is seeking an Indicative Rating or a Debt Rating as opposed to a Preliminary Assessment.

For the sake of clarity, A.M. Best primarily uses the mathematical definition of life

**Exhibit 6**  
**Life Expectancy as a Function of Mortality Rating\***

Based on a 75-Year-Old Male Nonsmoker.



\*Based on 2001 VBT. LE is defined as the weighted average time to death.



expectancy, which is the weighted average time to maturity of the lives/cashflows in the life settlement pool.

A.M. Best's experience has shown that the mortality ratings typically assigned by reputable medical examiners rarely exceed 500% of their base mortality tables, and that assigned mortality ratings generally decrease with age. A.M. Best recognizes that in cases where traditional underwriting is not applicable or in cases that merit extra mortality for a specified period of time (i.e. "flat extras"), the mortality rating could exceed the 500% threshold. However, A.M. Best does not believe that issuers can find enough supply to populate their life settlement portfolios with significant numbers of such policies unless the ramp-up period for the portfolio is several years. Therefore, A.M. Best imposes a mortality cap of 500% on all lives in the life settlement pool, unless the medical examiner that has issued the mortality ratings or the life expectancies in question shows precisely how it has applied net debits and credits to its standard mortality tables to arrive at its life expectancies, and a third medical examiner or a physician specialist is used to corroborate the mortality ratings or life expectancies.

Should an issuer decide not to seek a life expectancy from a medical examiner for an insured in a life settlement pool, A.M. Best will assume that the life expectancy is the same as that derived from a standard mortality table, such as the 2001 VBT (or any other table, such as the 2008 VBT, should that table be suitable for life settlements), and will stress the mortality rates for modeling purposes.

#### *A.2 Underwriting Evaluation of Medical Examiners*

If an issuer is seeking a Debt Rating, an independent actuarial firm or an independent consultant with demonstrated expertise in the life settlement market should be engaged to perform an audit/review of the processes and procedures medical examiners used to determine life expectancies. A.M. Best expects the issuer's representatives and/or the medical examiner to fully discuss the following regarding the medical examiner's underwriting practices:

- Underwriting methodology and philosophy;

### Exhibit 7 Effect of Life Expectancy Increase On Internal Rate of Return

Increase in LE (Months)	Internal Rate of Return (%)
0	12.4
3	11.6
6	10.7
9	10.0
12	9.2
15	8.5
18	7.8
21	7.1
24	6.5
27	5.9
30	5.3
33	4.7
36	4.3

- Physician/underwriter evaluator background and credentials;
- Standard mortality table(s) used to determine life expectancy estimates;
- Initial and ongoing training of staff;
- Self-auditing procedures (internal audits);
- Frequency of external/independent audits;
- The extent of the self-evaluation of the medical examiner's efficacy (i.e. results of experience studies from internal database);
- Record keeping and process flow;
- Source materials such as reinsurance manuals and clinical studies for specific diseases;
- Extent and frequency of updates of source materials/reinsurance manual;
- Recent changes and reasons for changes in the methodology used by medical examiners; and
- Comparative analyses of files selected by the actuarial firm or consultant reviewing medical examiner assessments; amount of files selected will depend on the number that the actuarial firm or consultant believes will help it form an informed opinion on the medical examiner's underwriting guidelines.

Among the questions that the issuer and the medical examiner should be prepared to answer are the following:

- What is the general nature of the adjustments made to the standard mortality table(s) used?
- Are flat extras used? If so, for what diseases?

- Are debits always additive? How are debits scaled back for co-morbidity?
- Under what circumstances are mortality tables abandoned and other methods applied for estimating life expectancies?
- Are mortality improvements factored into the life-expectancy figures?
- When using mortality tables, is “age near” or “age last” the applicable age used for the analysis?
- What are the maximum and minimum ages for which a life expectancy will be provided?
- What are the maximum and minimum mortality ratings issued?
- What is the maximum age of medical records for an evaluation? (For example, if medical records are 15 months old, will a life expectancy still be issued?)
- When medical records have aged, are the life expectancies provided adjusted for the period between the time the records were created and the time of the medical examiner’s evaluation?
- Is a survivorship schedule provided?
- Does the medical examiner provide joint life-expectancy calculations?

## B. Policy Providers

The provider purchases insurance policies from a seller or a licensed broker or agent authorized to act for the seller. The purchases of life settlements are made through licensed providers approved by the collateral manager of the transaction. In the case of life settlement securitizations, the provider purchases policies for the issuer pursuant to an origination agreement between the issuer and the provider. A.M. Best requires that the purchase agreement comply with all applicable state insurance laws and regulations governing life settlement or viatical financing transactions between the issuer and the life settlement providers.

Issuers must identify the providers they intend to use for their transactions. A.M. Best’s view on the providers will depend on the following considerations:

- The various states in which the providers are licensed to conduct business (in states where licensing is required);
- The partnerships between the providers and their network of policy suppliers and brokers;
- The providers’ prior policy purchasing

- experience for institutional investors;
- The providers’ historical policy acquisition pace;
- The providers’ infrastructure and systems for handling the administrative tasks and regulatory compliance issues associated with life settlements;
- Any significant pending legal matters against the provider; and
- Other factors that may give A.M. Best confidence in the transaction.

If a provider has any ongoing financial interest in the transaction aside from its capacity as the source of policies for the issuer, A.M. Best requires full disclosure of that relationship.

Note that A.M. Best maintains that a provider should not be the sole determinant of the policies that are to be purchased for the transaction. The provider certainly can present policies to the issuer’s representative (such as the collateral manager for the transaction), but the issuer should be the ultimate arbiter as to what policies should be in the transaction’s portfolio. One way to remove absolute discretion over which policies should be purchased for the transaction from the provider is for the issuer to give the provider a list of purchasing criteria; to tell the provider which medical examiners will be used in the transaction; and to have the collateral manager for the transaction put each life settlement through a designated pricing model, which determines rates of return for each policy.

One of the issues that has drawn the attention of life settlement market observers is the transaction cost paid by insureds to sell their insurance policies in the secondary markets. The transaction cost consists of payments for providers, brokers and insurance agents involved in the sale. A.M. Best’s analysis indicates that the typical transaction cost can be as high as 50% to 100% of the price paid to the insured. Therefore, an insurance policy for which the insured is paid, for example, 15% of the face value ultimately may be sold to investors for 23% to 30% of face value. Although the money paid to the insured still may be higher than the value he or she would receive if the policy were surrendered to the insurance company that issued the policy, there is something to be said for the insured being aware of the various transaction costs associated with the policy he or she has sold in the secondary market. A.M.

Best believes best practices in the area of life settlement transactions dictate that the seller of an in-force policy is fully aware of the various fees paid to intermediaries who facilitate the transaction.

### **C. Attorney Review of Insurable Interest, Licensing Requirements and Sales Documentation Packages**

One of the most fundamental concepts in life insurance is that of insurable interest. The insurable interest doctrine provides that in general, the beneficiary of an insurance policy must have 1) some relationship by blood or by law to the person being insured or 2) must have an economic interest in having the life, health or bodily safety of the individual insured continue. The insurable interest doctrine makes it possible, for example, for an individual to buy an insurance policy on his or her parents or business partner.

In the special case where a person procures a policy insuring his or her own life and pays the premiums for the policy, that person is said to have an unlimited insurable interest in his or her own life and, as such, may designate any person as the beneficiary of the policy. That beneficiary need not have any particular relationship to the insured. When the policy owner is not the insured, the beneficiary must be a person or an entity with insurable interest in the insured's life. A.M. Best requires that an attorney review each insurance policy to ensure that it conclusively passes the insurable interest test.

In general, after a provider makes a purchase offer to the seller of the insurance policy (normally, the insured), a sales documentation package is drafted. Through this documentation package, the issuer will contract to purchase from the seller all rights, titles and interests in the life settlement policy. The sales documentation package must be complete and must follow all applicable state insurance laws and regulations.

A.M. Best requires that attorneys review the following items:

- The completeness of the sales documentation package (for each insured) for compliance with established regulations

for life settlement acquisitions;

- The states in which each provider in the transaction is licensed to conduct business (for states that require such licenses) and the insurance regulations related to life settlements or viaticals for those states; and
- Any outstanding, significant legal issues surrounding the provider.

### **D. Tracking Agent**

The cash flow to the securities backed by life settlements depends on the payout of the death benefits (i.e. the maturity of the policies) by the insurers that have issued the policies in the collateral pool. Prompt collection of these death benefits requires the issuer to employ an independent tracking agent to track the lives covered by the insurance policies.

The specific roles of the tracking agent, which should be outlined in an agreement between the issuer and the tracking agent, are as follows:

- Preparing reports showing the insured's whereabouts, including address and date of last contact, to be provided to the issuer on at least a quarterly basis;
- Maintaining logs of the contacts with the insureds or other individuals, records of addresses and phone numbers of those contacts, and result of contacts;
- Preparing reports, if requested by the issuer, regarding the amount of funds needed to pay premiums prospectively; and
- Filing all necessary documents with each insurance company, including premium waivers, policy conversions, death certificates and documents necessary for the payment of death benefits.

A.M. Best will evaluate the tracking agents to be used in the transaction to determine whether they have experience in tracking large pools of lives and whether they have the technological resources to perform such functions. Issuers that feel they (or their providers) can track the insureds without employing a professional tracking agent must demonstrate to A.M. Best that they have experience in tracking lives, the software system set up to perform such tasks and the ability to provide the information listed above.

### E. Collateral Manager

A.M. Best expects the issuer to enter a collateral management agreement with a collateral manager or to demonstrate the ability to perform the duties of a collateral manager. Some of the duties of the collateral manager in life settlement securitizations include:

- Managing the selection and acquisition (through approved providers) of the life settlements;
- Optimizing the features of the insurance policies backing the life settlements;
- Determining the appropriate amount of the premium reserve;
- Determining whether to engage a “stop-loss” insurer or obtain a liquidity facility for the transaction;
- Investing cash balances in approved, high-quality, short-term instruments;
- Developing a liquidation plan for the life settlements;
- Determining the liquidation value of the life settlements;
- Updating mortality tables used in the transaction based on new information or new medical advances;
- Determining which policies should lapse in the event of a continued liquidity crisis; and
- Performing other duties in the interest of the transaction’s security holders.

Some of the factors that A.M. Best considers when evaluating a collateral manager are as follows:

- Experience in life settlement investments and portfolio optimization;
- Knowledge of insurance policy features or access to experienced consultants;
- Actuarial experience either on staff or through consultants;
- Staffing and resources necessary to support the collateral management activities;
- The quantitative skills to create financial models to select/manage a life settlement portfolio and to determine which policies to dispose of, lapse or modify (if necessary); and
- The systems and infrastructure necessary to carry out its duties.

### F. Backup Service Providers

Backup servicing agreements are important in life settlement transactions, because the

industry is in its development stage and servicers usually are small, unrated organizations. A.M. Best recommends that issuers seek backup tracking agents and collateral managers (which presumably also perform policy administration and optimization).

A.M. Best recommends the use of an active backup tracking agent that will periodically (at least on a semi-annual basis) receive information from the primary tracking agent on the lives it is tracking and on the latest contact it has made with the insured. The backup tracking agent should have the electronic systems in place to accept the data transmitted by the primary tracking agent and should be able to prepare reports on tracking activities as requested by A.M. Best.

The backup collateral manager should meet the same requirements described in Section 2.E. as to the expertise and experience any collateral manager should have.

### G. Auditors

Public accountants play an important role in monitoring the activity of the bankruptcy-remote entity that issues the life settlement-backed securities. Accountants assist in the evaluation and identification of “GAAP” internal control and reporting-related issues. In addition, they perform specific, year-end audits to express an opinion on the consolidated financial statements of the bankruptcy-remote entity. A.M. Best requires the engagement of a certified public accounting firm to perform the following services:

- Perform audits of the books and records of the issuer (i.e. bankruptcy-remote entity);
- Issue a yearly report that expresses an opinion on the consolidated financial statements issued by the bankruptcy-remote entity;
- Review the internal controls over cash receipts and disbursements performed at the legal entity; and
- Issue an opinion as to the GAAP consolidation requirements to the owners of the bankruptcy-remote entity.

### H. Arrangers of the Transaction

The arrangers of the life settlement securitization transaction should define clearly their financial interest in the transaction. In addition, for arrangers that are not affli-

ates of large financial institutions, A.M. Best expects to be presented with their backgrounds, including their previous occupations and experience with life settlements.

### **3. Medical Records**

#### **A. Up-to-Date Medical Examiner Reports**

As discussed earlier, all life settlements must be accompanied by two medical examiners' reports based on the most recent medical records on hand. The initial medical examiners' reports normally are completed within a few months of the insured's last medical visit with his or her physician. A.M. Best recommends that fresh medical examiners' reports be done if more than 12 months have elapsed between the first medical examiners' reports and the purchase of the policy for the pool. If the medical examiner's report on a life is "stale" (i.e. is more than 12 months old), A.M. Best will apply a slightly higher stress on the mortality rating or life expectancy on the life in question in the stress scenarios described at the end of this document.

Obtaining up-to-date medical records on the insureds poses a potential problem, as federal and state confidentiality laws restrict long-term access to such records. The federal medical-record confidentiality law, the Health Insurance Portability and Accountability Act of 1996 (HIPAA), provides minimum federal standards for obtaining authorization to get an insured's medical records. State confidentiality laws, which sometimes can be more restrictive than HIPAA, also must be observed.

#### **B. Medical Record Authorization Forms**

In acquiring life settlement collateral for a securitization, it is up to the issuer to ensure that the medical records authorization forms signed by insureds are broad enough to allow for continued access (by the issuer) to up-to-date medical records over at least a 12-month period or over the longest period allowed by applicable laws. This means that the issuer would have to ensure that the medical authorization forms comply with HIPAA's privacy requirements. Alternatively, the issuer may have to explore other methods of receiving health records, such as using limited health-care powers of attorney or providing incentives to the insureds for providing updated medical records.

A.M. Best recommends that issuers consult legal counsel for advice on any methods they choose to use to ensure that medical records can be obtained over the life of the portfolio in accordance with HIPAA's requirements in the event that the life settlement pool has to be liquidated. As a practical matter, it is unlikely that a buyer of a life settlement will have continual access to the medical records of the insured once the insured has been paid for his or her policy, even if the buyer has a limited health-care power of attorney. First, as time elapses, the insured may move and engage the services of a new physician, who may not be willing to comply with the request for medical records. Second, the insured has no incentive to provide medical records to the buyer of his or her insurance policy, and it may not be practical for such a buyer to enforce the right to get the records through legal action, even if there is an enforceable limited health-care power of attorney.

#### **C. Consistency Checks**

A.M. Best recommends that each policy be checked for consistency between the original insurance application and the medical records. This consistency check often can be performed by medical examiners or others who are familiar with the review of medical records. A.M. Best may engage outside consultants to perform consistency checks.

#### **4. Policy In-Force Period/Proper Transfer of the Policy**

Any policy contemplated for the collateral is required to have been in force for at least 24 months before being purchased by the issuer. Converted policies are considered new policies if new contestability or suicide conditions are imposed on the policies. It is the issuer's responsibility to ensure that its providers keep track of the dates on which policies were acquired by the insureds.

In addition, there should be some redundant checks and balances to ensure the proper transfer of policies to the bankruptcy-remote vehicle and to ensure that the policy will be unencumbered by challenges from relatives, former spouses and others. Attorneys are best qualified to give an opinion on whether policy transfers have followed the proper protocols.

## 5. Diversity

### A. Disease/Insurance Company

Diversity is an important factor in determining the composition of the collateral pool for life settlement transactions. In general, correlation among insureds in a life settlement portfolio occurs when a cure is discovered for a disease suffered by two or more insureds, because their life expectancies are increased simultaneously. Therefore, A.M. Best is unlikely to rate transactions based on only one specific disease such as Alzheimer’s or diabetes without applying severe stresses on the transactions. The lives in such transactions are susceptible to cures that can make such lives highly correlated, and that can increase the aggregate life expectancy of the insureds.

While life settlement portfolios are inherently diverse, based on the statistical distribution of disease categories as determined by the medical examiners, A.M. Best nevertheless recommends that issuers observe the maximum limits shown in **Exhibit 4** on the broad disease categories in the collateral pool. The categorization of diseases is determined by the assignment of debits as described in Section 2A.1.

Diversity of insurance companies also is important in life settlement transactions. A.M. Best requires that the aggregate face

value of the policies issued by any one insurance company not exceed 15%.

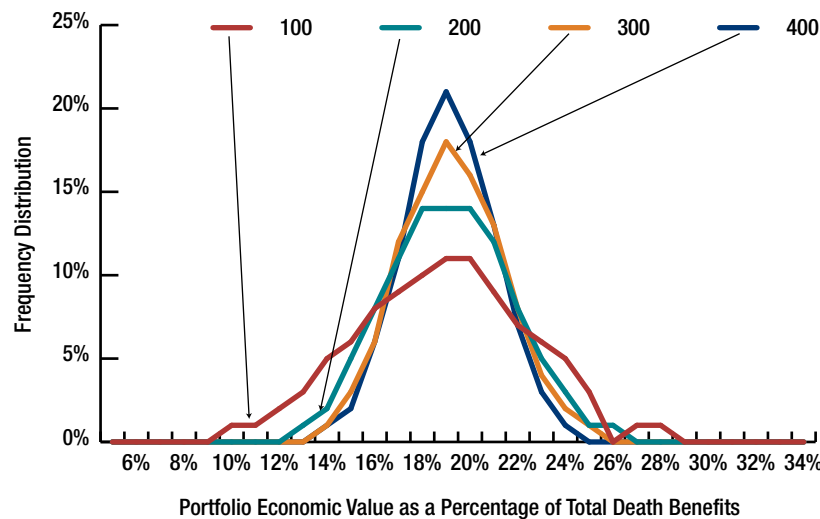
### B. Policy Count, Policy Size

This number of lives in a portfolio of life settlements can help dampen the volatility of the cash flows produced by A.M. Best’s stochastic life settlement model, which is discussed later in this document. **Exhibit 8** shows the effect of the number of lives on the economic value of a portfolio of 100, 200, 300 and 400 lives — all with a portfolio life expectancy of 9.6 years. The cash flows (premium, death benefits and expenses) were discounted at 12%. The exhibit shows that the expected economic value of each portfolio, expressed as the percentage of total death benefits of each portfolio, was about 19%. The standard deviations of the portfolios’ economic values, expressed as a percentage of portfolio death benefits, were as follows: 3.8% for 100 lives, 2.7% for 200 lives, 2.2% for 300 lives and 1.9% for 400 lives. Naturally, the more lives in the pool, the narrower the standard deviation of the portfolio’s economic value, but the desire to have a large portfolio must be balanced with 1) the marginal benefit (in terms of narrowing the dispersion of economic values) gained by adding more lives to the portfolio, and 2) the fact that it can take a long time to accumulate a sizable portfolio of life settlements. For these reasons, A.M. Best recommends that the collateral pool consist of at least 300 lives. If fewer lives are included in the life settlement portfolio, A.M. Best will apply additional stress scenarios in evaluating the credit quality of the securities in the transaction. Please note that a flawed approach by the medical examiners in either how they have constructed their standard mortality tables or how they determine and apply net debits and credits to these tables will not be ameliorated simply by having a large number of lives in a life settlement pool. Such systematic errors will simply be duplicated across a larger portfolio.

No one life should comprise more than 3.33% of the face value of the entire collateral pool. Inclusion of “jumbo” policies (\$10 million or more in face value) is considered on a case-by-case basis and is likely to be allowed if a third medical examiner issues a life-expectancy projection and/or the life expectancy is stressed further for modeling purposes.

**Exhibit 8**  
**Distribution of Portfolio Economic Value**

Portfolios of 100, 200, 300 and 400 lives with life expectancy of 9.6 years.\*



\*Mean Economic Value = 19% of Total Death Benefits

## 6. Longevity Risk Mitigation

Longevity risk is the risk that the insured lives longer than was reasonably predicted by medical examiners. The longer the insured lives, the more premiums the owner of the life settlement will have to pay and the further in the future the death benefits will be realized. Longevity risk typically can be managed by “stop-loss insurance” that allows the issuer to put the insurance policies to an insurer at a price equal to the face value of the policies if the insureds live a fixed number of years beyond the predicted life expectancy. Stop-loss insurance also can be structured to cover an entire portfolio by giving the issuer the option to put the entire portfolio to the insurer at a specific date for a specific price. The stop-loss insurer must be a rated entity. In addition, A.M. Best will review the contract that covers the stop-loss provisions to ensure that it is indeed an unconditional obligation to pay claims during the life of the transaction. At this writing, A.M. Best is not aware of any rated insurer or reinsurer that specializes in issuing life settlement stop-loss insurance. While A.M. Best does not require stop-loss insurance, such contingency insurance may enhance the transaction, depending on the cost to the issuer, although it comes with the additional credit risk of the insurer.

## 7. Estimating Portfolio Residual Value

A.M. Best’s analytical model for life settlement securitization generally shows that an issuer of securities with legal maturities less than 20 years likely will depend heavily on the residual value of the portfolio of life settlements at maturity to meet its financial obligations to noteholders. Therefore, a comprehensive model for evaluating the credit risk of the securities has to use conservative assumptions about liquidation timing and liquidation prices if all the life settlements have not matured before the legal maturity date of the securities. To estimate the residual value of an aged life settlement portfolio, A. M. Best does not rely on the original estimates of mortality ratings and life expectancies issued by medical examiners, as those estimates probably would be about 10 years old or more by the time the liquidation of the portfolio would take place, if necessary. Instead, A.M. Best currently applies a mortality table such as the standard 2001 VBT (unadjusted for impaired lives); the applicable premium

schedule for the policies (until the insureds are 100 years old); and various assumed discount rates to estimate the economic value of the remaining life settlements in the portfolio. Then, A.M. Best further haircuts this value to reflect the inefficiencies and extreme illiquidity of the life settlement market.

## 8. Liquidation Prospects/Liquidity Risk Mitigation

While the liquidation value of a life settlement portfolio is important at the end of the transaction, it also is important during the life of the transaction if it becomes necessary to sell policies to meet the transaction’s cash-flow needs. A.M. Best’s life settlement model assumes that liquidation is not a viable option to meet liquidity needs during the term of the transaction because of: 1) the uncertainties surrounding the liquidation value of an individual life settlement; 2) the extensive amount of time and effort it might take to actually sell a life settlement; and 3) the dramatic effect excessive sales of life settlements would have on the transaction’s future cash flows. In short, A.M. Best takes a dim view of any transaction that relies on the liquidation value of policies to meet short-term cash needs.

A transaction’s liquidity risk may be greater in its early years, especially since empirical evidence from various life settlement portfolios suggests that few deaths occur in the early years of the life settlement pools underwritten thus far. A common method of mitigating liquidity risk is to have adequate cash in a reserve fund to meet short-term cash-flow needs. The disadvantage of this method is that a large amount of cash in reserve reduces the amount of life settlements the issuer can buy for the transaction.

Another way to mitigate liquidity risk is with a liquidity facility from a rated financial institution. The liquidity facility can be used to pay premiums on the policies and/or interest to the noteholders. The financial institution offering the liquidity facility typically would place a lien on the life settlements in the transaction, and the repayment of the funds borrowed by the transaction usually is at the top of the transaction’s “priority of payment” list or “waterfall.” Maintaining and using a liquidity facility is beneficial if it is not expensive and the floating-rate costs are swapped to fixed costs. A.M. Best recommends that the liquidity facility

be in place for a term equal to at least 125% of the life expectancy,  $LE_{\text{final}}$ , derived from the Final Mortality Matrix as described later in this document. The revolving credit line for such a facility should be determined through the modeling of the transaction to ensure timely payment of premiums and/or interest and principal.

### 9. Life Settlement Pricing

The life settlement market still is developing, and there is no guarantee that any one policy provider or service provider will be in existence at the time the issuer is ready to acquire the policies or has completed its policy acquisition program. Therefore, A.M. Best will not consider the bargaining power of the issuer to achieve better prices on policies or services when evaluating the transaction for a Preliminary Assessment or an Indicative Rating. A.M. Best requires that all prices of policies and services reflect the prices prevalent in the market at the time of the evaluation of the transaction, not just prices promised by a provider, and not theoretical prices developed from a model. As discussed in an earlier section, an issuer who has entered a financial arrangement with a provider (aside from the agreement for purchasing policies through the provider) must disclose the full

nature of such an agreement. For the sake of clarity, the price that A.M. Best recognizes in life settlement transactions is the price that includes the fees paid to all the intermediaries involved in the transactions, such as fees paid to brokers, providers, etc.

### 10. Life Settlement Acquisition Schedule

The pace of portfolio acquisition depends on the availability of policies that meet the purchase criteria of the issuer. The data in **Exhibit 5** show that about 8% of the individuals offering their insurance policies for sale have life expectancies of six years or less as determined by medical examiners. This indicates that the supply of short life expectancies is limited, and thus the ramp-up period could be extremely long for any transaction that seeks collateral with short life expectancies, and the prices for such life settlements probably will be higher than standard pricing models will predict. The duration of the purchase period is particularly important because if this ramp-up period were prolonged, the transaction would experience “negative carry” since the issuer could not deploy capital quickly enough to earn higher returns than the borrowing cost.

If the issuer seeks an Indicative Rating and has not purchased all the policies required for the transaction, A.M. Best expects the purchase to be completed within six months of the issuance of the Indicative Rating. A.M. Best requires that the issuer provide an acquisition schedule that outlines the number of life settlements it realistically expects to purchase each month by life expectancy categories. The issuer also must demonstrate that its providers have the ability to supply a sufficient number of life settlements for the transaction in the time frame required.

**Exhibit 9** summarizes the general data requirements for a representative portfolio of life settlements pursuant to obtaining a Preliminary Assessment, an Indicative Rating and a Debt Rating.

### 11. Policy Optimization

Issuers may choose to optimize premiums on certain types of insurance policies (such as universal life and variable universal life policies) by using the cash values in the policies to reduce premium payments or simply

## EXHIBIT 9 General Data Requirements for Life Settlements

	Representative Portfolio of New Life Settlements (For Preliminary Assessment)	Actual & Representative Portfolio of New Life Settlements (For Indicative Rating or Debt Rating)
Age	✓	✓
Sex	✓	✓
Smoking Status	✓	✓
Annual Premium	✓	✓
Disease Classification		✓
Names of Insurance Companies		✓
Ratings of Insurance Companies		✓
Face Value of Policies	✓	✓
Assumed/Actual Life Expectancies	✓	✓
Mortality Rating	✓	✓
Mortality/Survivorship Schedule		✓
Yearly Premium	✓	✓
Assumed/Actual Price of Life Settlements	✓	✓
Assumed Policy Accumulation Period		✓
Unique Identification for Insured		✓
Unique Identification for Policy		✓



by reducing premium payments to the minimum levels necessary for keeping the policies in force. A.M. Best must be informed if the premiums on the representative policies upon which the rating is based have been altered in any way. Specifically, A.M. Best requests a monthly premium payment illustration showing premiums until the insured reaches age 100 or until the age at which the beneficiary is entitled to death benefits.

If the collateral manager uses commercially available software to determine premium payments under various optimization schemes, A.M. Best requires a demonstration of such software and wants comparisons between the software's output and some illustrations produced by the insurance companies that have issued the policies. If the collateral manager has developed its own software program for optimizing the policies, A.M. Best wants verification that the software can duplicate the results of some of the illustrations produced by the insurance companies. By doing so, A.M. Best is assured that the in-house software is able to produce accurate results.

As part of the optimization process, A.M. Best expects the collateral manager to consider scenarios under which charges that are realistically adjustable are increased to their maximum levels to observe the effect on the policies in terms of premium payments. A.M. Best may randomly sample the life settlements to observe the assumptions about the cost of insurance and expenses determined by the issuer.

### **12. Portfolio Liquidation Plan**

If the legal maturity of the securities is less than 20 years, A.M. Best requires a formal plan outlined in the legal document of the transaction for the liquidation of the portfolio to pay off the securities. Since the time needed to liquidate a portfolio of life settlements is difficult to determine, A.M. Best expects liquidation of the life settlement portfolio to begin at least two years before the maturity date of the securities, after considering the life settlements that are likely to mature in that two-year period. The liquidation value calculation should be determined with a mortality table, such as the standard 2001 VBT (unadjusted for impaired lives), and with stresses applied to this table as an extra measure of conservatism.

It is important to note that if the premiums on the policies have been optimized, the liquidation value of the life settlements at the end of the transaction could be affected adversely. The reasons for such an effect are as follows: a) since premiums accelerate naturally with the cost of insurance, premiums can be extremely high at the time the portfolio would be liquidated; b) A.M. Best applies a standard mortality table to life settlements to calculate the liquidation value of the portfolio; and c) A.M. Best further stresses such calculated liquidation values to take into consideration the inefficiencies in the life settlement market.

### **13. Management Expertise**

A qualitative aspect of A.M. Best's analysis is the assessment of the issuer's expertise in life settlements and structured securities. A small number of participants comprise the life settlement industry. Its participants have developed reputations in various areas, such as the ability to source policies, integrity in soliciting objective life expectancies and other matters related to the efficient execution of life settlement transactions. A.M. Best expects the issuer (or its representatives) to demonstrate a high degree of knowledge about policy providers, tracking agents, medical examiners and other significant service providers associated with the transaction. In addition, A.M. Best should be informed of any significant legal actions or complaints against any service provider that may be involved in the transaction.

### **14. Documentation**

#### **A. Tax Opinion**

Since life settlement collateral is a new asset class for securitizations, it is important that issuers understand its tax implications. Specifically, A.M. Best expects the issuer to engage tax advisers to provide an opinion regarding the recognition or amortization of expenses such as premium and administrative expenses in a bankruptcy-remote vehicle in the vehicle's country of domicile. Any requirements for tax withholdings also should be determined by tax advisers.

#### **B. General Legal Review/Tax Opinion/Documentation**

The following are some of the other required general opinions, conditions and

verifications for setting up a transaction collateralized by life settlements:

- Unqualified legal opinion indicating that the transfer of life settlements from the seller to the issuer constitutes a true or absolute sale, not a pledge of collateral.
- Legal opinion stating that if the transferor becomes insolvent, neither the issuer nor its assets or liabilities would be substantively consolidated with the transferor.
- Unqualified legal opinion that the issuer will satisfy special-purpose, bankruptcy-remote criteria such as:
  - Issuer's business must be restricted to the purchase of the life settlements and the issuance of the rated debt;
  - Issuer may not incur any additional debt unless the additional debt is subordinated fully to the rated debt and the subordination is explicitly stated in the legal documents;
  - Additional debt will not impair the rating of the rated debt;
  - Issuer should have a separate corporate existence with independent officers and directors, separate books and records, and appropriate meetings of the board of directors to authorize corporate action;
  - Issuer shall not engage in any dissolution, liquidation, consolidation, merger or asset sale (other than as provided in the relevant transaction

- documents) or amendment of its organizational documents so long as the rated securities are outstanding;
- All of the issuer's assets, such as the life settlements, the various proceeds accounts, the escrow accounts and all other assets that generate income for the structure, should be pledged to secure the issuer's debt;
- Tax opinion to the effect that the issuer would not be subject to federal, state or local taxes;
- If taxes are to be paid on the cash flow of the issuer, a tax opinion on the capitalization of certain expenses, including premium payments and fund-raising costs; and
- Written agreements with all service providers, such as tracking agent, providers and collateral managers.
- Normal documentation associated with private placements such as: offering memorandum, trust indenture, trustee agreements, etc.
- Report on each policy detailing any contradictions between the original insurance application and the medical records of the insured.
- Disclosure of any agreements (written or unwritten) between the issuer and any other parties that outline the distribution of the residuals in the transactions after the rated debt has been fully redeemed.
- Anti-money-laundering provisions in the legal documents.

## Exhibit 10 Summary of Policy Eligibility Criteria

---

- Insurance company must have a "B+" (Very Good) rating or higher.
  - Confirmation from the insurance company that the policy is in force and not within the grace period.
  - No restrictions prevent the payment of the current net death benefits at the insured's death, except for nonpayment of the current premiums.
  - Verification from the insurance company that the policy is not encumbered by any other party.
  - Confirmation from the insurance company that the policy has no outstanding debt.
  - Confirmation that policy language does not prevent lump-sum payments of full insurance benefits.
  - Face value of the policy or policies related to one insured does not exceed 3.33% of the total face value of the pool.
  - Face value of the policy or policies in any one disease category does not exceed the percentages shown in Exhibit 4.
  - Face value of the policy or policies issued by a single insurance company does not exceed 15% of the total face value of the pool.
  - Projected life expectancy of the insured is certified by two licensed medical examiners.
  - Purchases of fractionalized shares of policies generally are not permitted.
  - Group policies are not allowed unless they are convertible.
-

# Evaluating the Credit Risk of the Securities

## **1. Mortality Profile of the Life Settlements**

Rating securities backed by life settlements is more difficult than rating standard collateralized debt obligation securities backed by corporate bonds. For one thing, there are many more parameters — from an analytical perspective — that can greatly affect the cash flow of a life settlement portfolio, such as: the age of the individuals behind the life settlements; their life expectancies (and the statistical distribution around the life expectancies); gender; smoking status; the premium payments; the credit risk of the insurance companies that issued the policies; and regulatory issues that surround the collateral in such transactions. By contrast, corporate bonds often are rated individually, and their maturity dates generally are known with certainty. Therefore, credit risk is the primary risk when rating securities backed by such bonds. The ratings of life settlement-backed securities are determined primarily by mortality risk, which is more difficult to quantify because of the various factors mentioned earlier. For example, two individuals can have the same life expectancy but different yearly probabilities of death because of differences in age, gender or lifestyle.

As discussed earlier, it is important that a medical examiner provide 1) its standard mortality tables upon which debits and credits are applied; 2) a mortality rating that the medical examiner applies to its base mortality table to derive the life expectancy for each insured; 3) a life expectancy estimate for each insured (including the joint life expectancy estimates for second-to-die policies); 4) a mortality or survivorship schedule for each insured (given medical impairments); 5) the primary disease category for each insured, if one has been identified; and 6) any reports that validate the historical accuracy of the medical examiners' life-expectancy projections.

If a medical examiner provides its standard mortality tables; the mortality ratings for the insureds in a life settlement pool; and its methodology for applying the mortality ratings to the tables, A.M. Best is willing to review and, perhaps, use the mortality tables for its analyses as long as they have been constructed with the help of a reputable independent actuarial

firm that provides a report on the methodology used for constructing the tables.

A.M. Best is aware, however, that some medical examiners consider their standard mortality tables to be proprietary, and thus only provide life expectancies and mortality ratings. In these cases, A.M. Best will assume each medical examiner's standard table is currently the 2001 VBT and solve for the mortality ratings that will yield such life expectancies and then apply those mortality ratings to the 2001 VBT. Please note that if A.M. Best derives mortality ratings that are much higher than the mortality ratings issued by the medical examiner, A.M. Best will conclude that the medical examiner's standard mortality tables are different from the VBT 2001 tables. In such cases, A.M. Best may apply more punitive stresses on the transaction. The resulting mortality profiles for insureds in a life settlement pool are used in the stochastic cash flow modeling. If, in the future, medical examiners base their standard table on another mortality table such as the 2008 VBT, A.M. Best will apply that table in its analysis if it deems that table to be suitable for life settlement transactions.

## **2. Insurance Company Impairment Risk**

The risk of insurance company impairments is an additional factor to be considered in assessing the credit risk of securities backed by life settlements. A.M. Best designates an insurance company as financially impaired upon the first official state action taken by an insurance department on that company. Such state actions include involuntary liquidation, supervision, rehabilitation, receivership, conservatorship, a cease-and-desist order, suspension, license revocation, administrative order and any other action that restricts a company's freedom to conduct its insurance business as normal. A.M. Best maintains ratings on an overwhelming majority of U.S. insurance companies, so it is highly likely that there are A.M. Best ratings on all the insurance companies in the life settlement pool. A.M. Best requires that the insurance company candidates for inclusion in the transaction pool have Financial Strength Ratings (FSRs) of "B+" or higher.

A.M. Best's approach to evaluating the credit risk in life settlement transactions begins

with a determination of the impairment rate of each insurance company in the collateral pool. A.M. Best has developed a proprietary impairment rate table based upon its proprietary database of more than 5,000 domestic insurance companies it has rated over the past 30 years. This data set, combined with approximately 680 incidents of impairments, forms the basis for the most comprehensive impairment statistics in the insurance industry. As a result, A.M. Best has calculated long-term, cumulative average impairment rates that can be applied to structured transactions such as life settlement securitization transactions. Please see the latest methodology report “Best’s Impairment Rate and Rating Transition Study,” at [www.ambest.com/ratings/methodology](http://www.ambest.com/ratings/methodology) for a discussion on insurance company impairments. The latest available cumulative impairment rate table at the time of this writing is shown in **Exhibit 11**.

### 3. Recoveries of Death Benefits After Insurer Impairments

Insurance company impairments may result in the diminution of death benefits. In general, guaranty funds cover nearly all death benefits in the event of an insurance company’s impairment, up to a limit of about \$300,000 in many states. However, this \$300,000 payment limit is probably smaller than the face values of the policies in most life settlement transactions, which generally range from \$1 million to \$2 million.

The unpaid death benefits are paid out of the estate of the insolvent insurance company if the company goes into liquidation. While the anecdotal evidence is that policyholders rarely lose money in life insurance company insolvencies, a rigorous life settlement model must include the possibility of losing money should such events occur. In addition, no one can be certain that as more life settlement transactions and securitizations are consummated, legislators won’t impose restrictions on payments to the bankruptcy-remote vehicles that own life settlements in the event of insurance company impairments. A.M. Best assumes the recovery rates in **Exhibit 12** for the proceeds of impaired insurance companies. The recoveries are assumed to be achievable in three months.

### 4. Life Settlement Liquidation Value During Impairment

If there are life settlements that have not yet matured at a transaction’s legal maturity, the issuer would have to liquidate policies and use the proceeds to pay any outstanding obligations to security holders. A.M. Best assumes no liquidation value for life settlements issued by insurance companies that have FSRs below “B+” (i.e. ratings at “B” and below) and that have not matured by the end of the transaction. This is particularly important for transactions in which the legal maturity of the securities issued by a bankruptcy-remote vehicle is shorter than the maturity of the last life settlements in the transaction.

Exhibit 11  
Best’s Cumulative Average Impairment Rates\*

Years	A++/A+	A/A-	B++/B+	B/B-	C++/C+	C/C-	D
1	0.06%	0.20%	0.75%	2.09%	3.44%	6.08%	7.38%
2	0.20%	0.61%	1.80%	4.30%	5.73%	9.54%	12.42%
3	0.36%	1.14%	2.89%	6.38%	8.55%	12.08%	17.23%
4	0.53%	1.68%	4.24%	8.24%	11.29%	14.64%	21.50%
5	0.70%	2.30%	5.66%	10.21%	13.64%	17.28%	25.62%
6	0.94%	2.96%	6.88%	12.31%	15.93%	21.00%	29.71%
7	1.19%	3.61%	8.16%	14.27%	18.07%	24.10%	33.12%
8	1.46%	4.34%	9.19%	15.99%	20.85%	27.48%	36.00%
9	1.80%	5.00%	9.99%	17.73%	23.07%	30.04%	38.51%
10	2.15%	5.65%	10.90%	19.38%	24.73%	32.09%	40.87%
11	2.50%	6.33%	11.78%	21.05%	26.08%	34.67%	43.28%
12	2.95%	6.93%	12.72%	22.64%	26.98%	36.71%	45.23%
13	3.45%	7.50%	13.65%	24.13%	27.83%	38.17%	46.92%
14	3.95%	7.97%	14.57%	25.38%	29.12%	39.74%	48.22%
15	4.31%	8.42%	15.19%	26.57%	29.95%	41.42%	49.48%

\*Table is from the methodology document titled “Best’s Impairment Rate and Rating Transition Study — 1977 to 2006,” published Feb. 26, 2007.

**Exhibit 13**, Best’s One-Year Rating Transition Matrix, shows the movement of ratings over a one-year period. Such a matrix can be helpful in estimating the probability of company ratings moving below “B+.” For example, the exhibit shows that a company originally rated in the “A/A-” (Excellent) category has a probability of 1.08% of being downgraded below “B+” over a one-year period. A.M. Best applies the appropriate transition matrix (after applying some simplifying assumptions and using matrix multiplication) to its analysis, depending on the legal term of the transaction being evaluated.

### 5. Cash-Flow Model/Use of Debt Default Table

A.M. Best has developed its own, proprietary Monte Carlo simulation model for evaluating life settlement transactions, but the company expects to receive a copy of a model created by the issuer (or its representatives)

that takes into consideration prices and face values of the life settlements; the statistical distribution of deaths; insurance company impairments; recoveries associated with such impairments; premiums; liquidation value; payments on the securities collateralized by the life settlements; and other significant modeling parameters. A.M. Best will model the transaction and compare its results with the output from the issuer's model.

### A. Determining the Final Mortality Matrix

To model the transaction, A.M. Best first determines the Final Mortality Matrix, which is the mortality matrix used for the Monte Carlo simulation. This matrix is derived from the information provided by medical examiners, with modifications as determined by A.M. Best. The modifications are to compensate for the possibility that a) medical examiners are systematically misestimating life expectancies and b) the individuals selling their policies are healthier than the insured population experience employed in creating standard mortality tables that are used for evaluating life settlement transactions.

If the medical examiners only provide life expectancies and mortality ratings, then the following procedures will determine the Final Mortality Matrix:

1. Given a portfolio of life settlements, get the Standard Mortality Matrix for the pool given the age, gender and smoking status for each life. The Standard Mortality

Matrix currently is assumed to be taken from the 2001 VBT. The 2008 VBT may be used sometime in the future.

2. Given the Standard Mortality Matrix and the death benefit for each life in the life settlement pool, derive the weighted average time to maturity for the pool. This will be considered the base life expectancy for a cohort of standard risks,  $LE_{\text{standard}}$ .

3. Given the life expectancy for each life in the Standard Mortality Matrix, derive the mortality multiplier for each life,  $MM_i$  (where  $i$  ranges from 1 to the total number of lives in the portfolio).

4. Multiply each life in the Standard Mortality Matrix by its corresponding mortality multiplier,  $MM_i$  derived in Step 3. The new mortality matrix will be called the Impaired Mortality Matrix.

5. Given the Impaired Mortality Matrix and the face value for each life in the pool, derive the weighted average time to maturity for the pool. This will be considered

### Exhibit 12 Assumed Recoveries After Insurance Company Impairments

Policy Face Value	% Recoveries
\$300,000	100
1,000,000	85
2,000,000	80

### Exhibit 13 Best's One-Year Rating Transition Matrix\*

	A++/A+	A/A-	B++/B+	B/B-	C++/C+	C/C-	D	Impaired
A++/A+	92.62%	6.90%	0.39%	0.03%	0.00%	0.00%	0.00%	0.06%
A/A-	4.19%	91.15%	3.58%	0.61%	0.10%	0.06%	0.12%	0.20%
B++/B+	0.36%	10.93%	81.03%	5.51%	0.63%	0.31%	0.48%	0.75%
B/B-	0.27%	1.03%	15.12%	75.35%	3.96%	0.98%	1.21%	2.09%
C++/C+	0.23%	0.58%	1.86%	18.18%	67.07%	5.30%	3.32%	3.44%
C/C-	0.00%	0.63%	0.25%	4.43%	15.19%	65.44%	7.97%	6.08%
D	0.10%	0.55%	1.05%	3.06%	3.11%	3.56%	81.18%	7.38%

		Rating One Year Later	
		Secure	Vulnerable
Secure		98.03%	1.97%
Vulnerable		9.92%	90.08%

\*Table is from the methodology document titled "Best's Impairment Rate and Rating Transition Study – 1977 to 2006," published Feb. 26, 2007.

the base life expectancy for a cohort of impaired lives,  $LE_{\text{impaired}}$ .

6. If  $LE_{\text{impaired}} \geq 80\% \times LE_{\text{standard}}$ , stop and use the Impaired Mortality Matrix derived in Step 4 as the Intermediate Mortality Matrix and go to Step 8.

7. If  $LE_{\text{impaired}} \leq 80\% \times LE_{\text{standard}}$ , multiply the mortality profile for each life in the Impaired Mortality Matrix by a constant factor (less than 1), Factor, such that  $LE_{\text{impaired}} = 80\% \times LE_{\text{standard}}$ . We will call the portfolio the Intermediate Mortality Matrix, and the LE that equates to 80% of  $LE_{\text{standard}}$  will be called  $LE_{\text{intermediate}}$ .

8. Derive the Final Mortality Matrix by multiplying the Intermediate Mortality Matrix by an adjustment factor for each life,  $\text{Adjustment}_i$ , which is calculated as follows:

- If Death Benefit is less than or equal to \$2 million,  $\text{Adjustment}_i = 100\%$
- If Death Benefit is greater than or equal to \$7 million,  $\text{Adjustment}_i = 80\%$
- If Death Benefit is between \$2 million and \$7 million,  $\text{Adjustment}_i = (-4\% \times \text{Death Benefits in Millions}) + 108\%$

9. Calculate the life expectancy,  $LE_{\text{final}}$ , of the Final Mortality Matrix.

The procedures above are performed with data provided by each medical examiner. The Final Mortality Matrix chosen for the analysis will be the matrix that yields the highest portfolio life expectancy. The Final Mortality Matrix will be used in running the base Monte Carlo simulation for determining the base default probability of the securities. An example of how the Final Mortality Matrix is derived is shown in the appendix for a small portfolio of 20 life settlements.

If the medical examiner provides its standard mortality tables, mortality ratings and life expectancies (and assuming that A.M. Best decides to use the standard mortality tables for its analyses), then the Final Mortality Matrix is derived as follows:

1. Given a portfolio of life settlements, get the Standard Mortality Matrix from the medical examiner for the pool given the age, gender and smoking status for each life.

2. Given the Standard Mortality Matrix and the death benefit for each life in the life settlement pool, derive the weighted average time to maturity for the pool. This will be considered the base life expectancy for a cohort of standard risks,  $LE_{\text{standard}}$ .

3. Multiply each life in the Standard Mortality Matrix by its corresponding mortality multiplier,  $MM_i$ , given by the medical examiner according to the methodology employed by the medical examiner. The new mortality matrix will be called the Impaired Mortality Matrix.

4. Given the Impaired Mortality Matrix and the face value for each life in the pool, derive the weighted average time to maturity for the pool. This will be considered the base life expectancy for a cohort of impaired lives,  $LE_{\text{impaired}}$ .

5. If  $LE_{\text{impaired}} \geq 80\% \times LE_{\text{standard}}$ , stop and use the Impaired Mortality Matrix derived in Step 3 as the Intermediate Mortality Matrix and go to Step 7.

6. If  $LE_{\text{impaired}} \leq 80\% \times LE_{\text{standard}}$ , multiply the mortality profile for each life in the Impaired Mortality Matrix by a constant factor (less than 1), Factor, such that  $LE_{\text{impaired}}$  equals 80% of  $LE_{\text{standard}}$ . We will call the portfolio the Intermediate Mortality Matrix, and the LE that equates to 80% of  $LE_{\text{standard}}$  will be called  $LE_{\text{intermediate}}$ .

7. Derive the Final Mortality Matrix by multiplying the Intermediate Mortality Matrix by an adjustment factor for each life,  $\text{Adjustment}_i$ , which is calculated as follows:

- If Death Benefit is less than or equal to \$2 million,  $\text{Adjustment}_i = 100\%$
- If Death Benefit is greater than or equal to \$7 million,  $\text{Adjustment}_i = 80\%$
- If Death Benefit is between \$2 million and \$7 million,  $\text{Adjustment}_i = (-4\% \times \text{Death Benefits in Millions}) + 108\%$

8. Calculate the life expectancy,  $LE_{\text{final}}$ , of the Final Mortality Matrix.

As before, the procedures above are performed with data provided by each medical examiner. The Final Mortality Matrix chosen for the analysis will be the matrix that yields the highest portfolio life expectancy. Once

again, the Final Mortality Matrix will be used in running the base Monte Carlo simulation for determining the default probability of the securities.

### B. Modeling Basics

At its most basic level, A.M. Best’s model generates cash-flows for every policy after considering the appropriate mortality table, the premiums and the death benefit. As an example, assume that a 75-year-old male insured has a 1.6% probability of dying by age 76, a 2.0% probability of dying by age 77 (if he survives age 76) and a 2.7% probability of dying by age 78 (if he survives age 77).

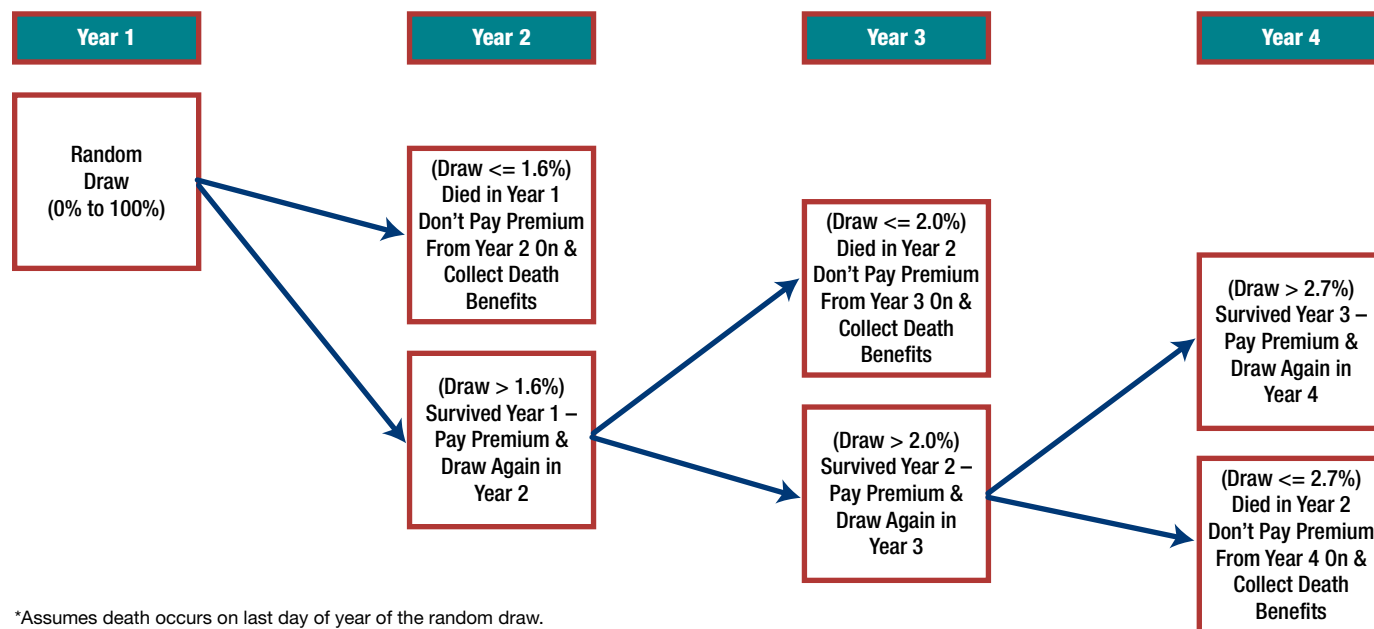
In the simulation process, for the first year when the probability of the insured dying is 1.6%, A.M. Best draws a random number between 0% and 100%. If that random number is less than or equal to 1.6%, the insured is assumed dead, premium payments on the life are stopped (after the first year), and the death benefit is collected. If that random number is greater than 1.6%, the insured is assumed to be alive, the insured survives to the second year, and premium payments continue. In the second year, where the probability of the insured dying is 2.0%, a random number is drawn once again and either the person lives (i.e. the random number is above 2.0%) or dies (i.e. the random number is less

than or equal to 2%). In the third year, where the probability of the insured dying is 2.7%, a random number is drawn once again and either the person lives (i.e. the random number is above 2.7%) or dies (i.e. the random number is less than or equal to 2.7%). **Exhibit 14** shows the possible pattern of death or survival over a 3-year period for this example.

The analysis is the same for a portfolio of several hundred policies that may mature in 20 or 30 years. For each trial in the simulation, the model aggregates the cash flows (death benefits, premium payments, etc.) for a portfolio of life settlements and makes payments as prescribed by the transaction’s waterfall. When payments are not made in full because of a cash-flow shortage, the model records a default. The ultimate output of A.M. Best’s cash-flow model is the default rate — the total number of defaults for all trials divided by the number of trials. This default rate then is tied to Best’s Idealized Default Matrix (**Exhibit 15**), which shows the default rates associated with debt ratings. The credit quality of the securities is based on the long-term credit rating scale, not the FSR scale.

Please note that the simplified example above ignores insurance-company defaults, correlation of lives and other modeling parameters that are considered in the model.

**Exhibit 14**  
**Paths of Death or Survival in the Monte Carlo Simulation\***



\*Assumes death occurs on last day of year of the random draw.

### 6. Stresses

As discussed earlier, life settlement securitizations are more difficult to evaluate than a typical collateralized debt obligation because of the various risks, including longevity risk and regulatory risks, that must be considered. Some of the items A.M. Best stresses include the following:

1. The Final Mortality Matrix (including stresses in the first three years of the transaction when there typically are very few deaths);
2. Mortality improvements;
3. Premium payments;
4. The correlation of lives (based on cure discoveries);
5. The time between death of the insureds and the collection of the death benefits;
6. The cost of tracking the insureds (if a new tracking agent must be hired);
7. Interest rates for unhedged floating-rate funding;
8. Insurance company impairments and recoveries;
9. The ratings of liquidity providers;

10. The ratings of any companies providing longevity cover, if any; and

11. The liquidation value of the remaining life settlement collateral (if any) at the end of the transaction.

### 7. Qualitative Issues

In rating securities collateralized by life settlements, A.M. Best also considers some of the issues that may not be directly quantifiable but could have a significant impact on the rating of the transaction. Some of the issues A.M. Best considers in the analyses include, but are not limited to, the following:

1. The infrastructure set up by the collateral manager to manage the transaction;
2. The track record of the medical examiners as shown by actual to expected ratios certified by reputable actuarial firms;
3. Whether the issuer (or its representative) has hired actuaries to help it understand mortality profiles on impaired lives of the elderly;
4. How long the designated medical examiners in the transaction have been providing life expectancies to independent third parties;
5. Whether the issuer has performed

Exhibit 15  
Best's Idealized Default Matrix\*

Years	aaa	aa+	aa	aa-	a+	a	a-	bbb+	bbb	bbb-	bb+	bb	bb-
1	0.03%	0.03%	0.04%	0.05%	0.06%	0.11%	0.16%	0.21%	0.23%	0.27%	0.67%	1.20%	2.30%
2	0.08%	0.11%	0.13%	0.23%	0.32%	0.44%	0.56%	0.67%	0.74%	0.89%	1.96%	3.26%	5.28%
3	0.14%	0.20%	0.26%	0.42%	0.58%	0.76%	0.95%	1.13%	1.25%	1.51%	3.18%	5.23%	8.10%
4	0.22%	0.31%	0.41%	0.62%	0.84%	1.08%	1.33%	1.58%	1.76%	2.13%	4.35%	7.11%	10.78%
5	0.31%	0.45%	0.58%	0.84%	1.10%	1.41%	1.71%	2.02%	2.25%	2.75%	5.46%	8.91%	13.31%
6	0.42%	0.60%	0.79%	1.08%	1.37%	1.73%	2.09%	2.46%	2.74%	3.37%	6.51%	10.63%	15.71%
7	0.53%	0.77%	1.01%	1.33%	1.64%	2.06%	2.47%	2.88%	3.21%	3.98%	7.51%	12.26%	17.96%
8	0.66%	0.96%	1.25%	1.58%	1.92%	2.38%	2.84%	3.31%	3.68%	4.58%	8.45%	13.81%	20.09%
9	0.79%	1.15%	1.51%	1.85%	2.20%	2.70%	3.21%	3.72%	4.13%	5.18%	9.34%	15.28%	22.08%
10	0.94%	1.36%	1.79%	2.13%	2.48%	3.03%	3.58%	4.13%	4.58%	5.76%	10.18%	16.67%	23.95%
11	1.09%	1.58%	2.08%	2.42%	2.76%	3.35%	3.94%	4.53%	5.01%	6.33%	10.96%	17.98%	25.70%
12	1.24%	1.81%	2.38%	2.72%	3.05%	3.68%	4.30%	4.92%	5.43%	6.88%	11.69%	19.21%	27.34%
13	1.40%	2.05%	2.69%	3.02%	3.35%	4.00%	4.65%	5.31%	5.84%	7.42%	12.36%	20.36%	28.86%
14	1.57%	2.29%	3.01%	3.33%	3.64%	4.32%	5.01%	5.69%	6.25%	7.93%	12.99%	21.44%	30.28%
15	1.73%	2.53%	3.34%	3.64%	3.94%	4.65%	5.36%	6.06%	6.64%	8.43%	13.57%	22.43%	31.59%

\*Table is taken from the methodology report "Best's Idealized Default Matrix," published Dec. 5, 2007.



a consistency check on the policies to ensure that the underwriting of the original insurance policy was done with accurate information;

6. The extent to which attorneys have reviewed the sales documentation packages for each life settlement in the portfolio and are satisfied that the sellers have insurable interest in the lives of the insureds.

7. The experience of the issuer or arranger with life settlement transactions — A.M. Best feels that total reliance on consultants (especially if their involvement is only at the beginning of the transaction) leaves the issuer vulnerable when decisions have to be made regarding policy management as the transaction ages;

8. The existence of designated backups for significant service providers, such as collateral managers and tracking agents;

9. The extent to which the sellers of the policies know all the fees paid to all intermediaries in the transaction.

10. The existence of a well-defined liquidation plan (for transactions with legal maturities of less than 20 years) that must be carried out by the collateral manager;

11. The ability and willingness of the issuer to provide the surveillance data on a timely basis for monitoring the transaction, including auditing information;

12. The capacity of the provider to originate policies at the pace assumed by the issuer; and

13. The extent to which a purchased portfolio meets the requirements and recommendations outlined for newly originated policies in this methodology.

## Surveillance Requirements for Transactions

There are no surveillance requirements for securities with Preliminary Assessments, because such evaluations are performed based on the projected portfolios and information provided to A.M. Best at the time of the evaluation. The Preliminary Assessment is not updated even when market conditions such as the available life expectancies and prices change.

Unlike the Preliminary Assessments, the Indicative Ratings and Debt Ratings are public ratings on real securities and, as a result, may be revised as the ramp-up is completed or as the transaction matures. To monitor securities with Indicative Ratings or Debt Ratings, A.M. Best requires the following information about each insurance policy at the inception of the transaction:

- Policy expiration date, if applicable;
- Policy face value;
- Date the policy first was sold into the secondary market;
- Date the policy was acquired for the transaction;
- Price of the policy;
- Medical examiners used;
- Insured's date of birth;
- Any and all life expectancies estimated by medical examiners;
- Date of each life expectancy evaluation;
- Date of the latest medical records used for the life expectancy evaluations;
- An indication of policies that required a third medical examiner;
- The monthly premium payments to age 100;
- Name of tracking agent;
- Primary disease category identified by medical examiners, if any;
- State where insured lived at the time the sale documentation package was executed; and
- Name of policy provider and states where the provider is licensed.

After the transaction has been up and running, A.M. Best would like immediate notification of:

- The date of death of any insured as shown on the death certificate;

- The date the death was reported to the issuer or discovered by the issuer;
- The date the death benefit was collected;
- The liquidation price of the policy (if policy is sold);
- The cumulative premium payment for each deceased insured;
- Any changes in premium payments, death benefits, crediting rates, expense charges, borrowings against policies or other features that could affect the net cash flow of the life settlement;
- Any planned changes in the calculation methodologies by the insurers issuing the policies in the pool that can affect premium payments, death benefits, crediting rates, expense charges or other features that could affect the net cash flow of the life settlement; and
- Any lapse notification to the insurer.

following information for any insured:

- Cumulative death benefits received;
- Cumulative dividends received on each policy;
- Cumulative premium payment for each policy;
- The policies that had a change in premium or net death benefits; and
- Policies with debt.

Every six months, A.M. Best expects a projection of the maturities in the life settlement portfolios from that point to the end of the transaction. If the projected maturities result in a shortfall of the cash flow necessary to pay the premiums or any principal or interest due on the securities, A.M. Best expects to see a plan from the issuer for averting a liquidity crisis. A.M. Best also will periodically request information from the back-up tracking agent to make sure it has up-to-date records of the insureds being tracked.

On a quarterly basis, A.M. Best would like the

## Appendix: Determining the Final Mortality Matrix

### Step 1 Portfolio of Life Settlements

Policy #	Death Benefits	Gender	Age	LE
1	\$600,000	M	89	74
2	200,000	M	75	120
3	2,000,000	F	78	140
4	1,000,000	F	76	130
5	266,666	F	76	160
6	7,000,000	M	79	120
7	5,000,000	F	84	87
8	2,889,110	M	77	125
9	3,000,000	M	81	100
10	500,000	M	78	120
11	600,000	M	79	120
12	500,000	M	82	100
13	1,000,000	F	78	90
14	500,000	M	80	100
15	1,000,000	M	83	80
16	3,000,000	M	84	84
17	800,000	M	73	100
18	2,000,000	F	79	110
19	2,000,000	F	79	100
20	2,889,110	M	77	120
<b>Total Death Benefits</b>	<b>\$36,744,886</b>			

Step 1 (continued)  
Standard Mortality Matrix (VBT 2001)

Policy #	YEAR																			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
1	6.52%	9.40%	13.77%	16.96%	20.77%	22.34%	23.99%	25.48%	27.05%	28.71%	30.44%	32.26%	34.19%	36.23%	38.39%	40.66%	43.02%	45.52%	48.16%	50.95%
2	1.09%	1.37%	1.79%	2.23%	2.52%	2.99%	3.41%	3.84%	4.80%	5.74%	6.90%	8.23%	9.76%	11.48%	13.40%	15.55%	16.81%	18.11%	21.14%	22.66%
3	1.03%	1.24%	1.54%	1.94%	2.45%	3.04%	3.75%	4.55%	5.46%	6.48%	7.58%	8.80%	9.68%	10.64%	11.67%	12.83%	14.08%	15.46%	16.96%	18.63%
4	0.79%	0.92%	1.14%	1.45%	1.84%	2.33%	2.90%	3.57%	4.33%	5.19%	6.13%	7.16%	7.96%	8.80%	9.68%	10.64%	11.68%	12.84%	14.10%	15.48%
5	0.79%	0.92%	1.14%	1.45%	1.84%	2.33%	2.90%	3.57%	4.33%	5.19%	6.13%	7.16%	7.96%	8.80%	9.68%	10.64%	11.68%	12.84%	14.10%	15.48%
6	1.31%	1.93%	2.66%	3.50%	4.15%	5.27%	6.12%	7.69%	8.39%	9.99%	11.75%	13.70%	15.71%	17.81%	21.05%	22.60%	24.23%	25.70%	27.25%	28.86%
7	2.12%	3.51%	4.13%	4.84%	5.68%	6.66%	7.77%	9.03%	10.42%	11.95%	13.61%	15.42%	16.93%	18.59%	20.39%	22.39%	24.56%	26.92%	29.52%	32.03%
8	1.15%	1.65%	2.17%	2.72%	3.18%	3.67%	4.46%	5.44%	6.27%	7.85%	9.33%	11.01%	12.88%	14.93%	16.57%	18.05%	21.10%	22.66%	24.26%	25.73%
9	1.54%	2.43%	3.47%	4.65%	5.97%	7.45%	8.21%	9.50%	10.87%	12.76%	14.69%	17.27%	21.01%	22.56%	24.18%	25.65%	27.19%	28.83%	30.55%	32.35%
10	1.22%	1.78%	2.39%	3.08%	3.58%	4.30%	5.40%	6.19%	7.82%	9.32%	10.99%	12.86%	14.92%	16.55%	18.03%	21.07%	22.63%	24.26%	25.73%	27.25%
11	1.31%	1.93%	2.66%	3.50%	4.15%	5.27%	6.12%	7.69%	8.39%	9.99%	11.75%	13.70%	15.71%	17.81%	21.05%	22.60%	24.23%	25.70%	27.25%	28.86%
12	1.71%	2.80%	4.04%	5.42%	6.95%	8.13%	9.42%	10.78%	11.49%	14.67%	17.25%	20.99%	22.54%	24.17%	25.63%	27.17%	28.80%	30.53%	32.35%	34.26%
13	1.03%	1.24%	1.54%	1.94%	2.45%	3.04%	3.75%	4.55%	5.46%	6.48%	7.58%	8.80%	9.68%	10.64%	11.67%	12.83%	14.08%	15.46%	16.96%	18.63%
14	1.41%	2.15%	3.01%	4.01%	5.14%	6.04%	7.57%	8.30%	9.60%	11.35%	13.26%	15.23%	17.39%	21.03%	22.58%	24.21%	25.67%	27.22%	28.85%	30.56%
15	1.97%	3.28%	4.74%	6.32%	8.05%	9.33%	10.70%	11.41%	14.62%	17.24%	20.98%	22.52%	24.15%	25.61%	27.15%	28.78%	30.51%	32.33%	34.26%	36.27%
16	2.36%	3.89%	5.55%	7.34%	9.25%	10.63%	11.34%	14.55%	17.20%	20.97%	22.51%	24.13%	25.59%	27.14%	28.77%	30.49%	32.32%	34.24%	36.27%	38.41%
17	0.78%	1.16%	1.50%	1.80%	2.09%	2.38%	2.71%	3.28%	3.63%	4.43%	5.33%	6.37%	7.59%	9.00%	10.62%	12.44%	14.21%	15.96%	17.01%	18.73%
18	1.08%	1.46%	1.81%	2.27%	2.82%	3.48%	4.26%	5.13%	6.12%	7.21%	8.41%	9.67%	10.63%	11.67%	12.81%	14.08%	15.45%	16.96%	18.61%	20.43%
19	1.08%	1.46%	1.81%	2.27%	2.82%	3.48%	4.26%	5.13%	6.12%	7.21%	8.41%	9.67%	10.63%	11.67%	12.81%	14.08%	15.45%	16.96%	18.61%	20.43%
20	1.15%	1.65%	2.17%	2.72%	3.18%	3.67%	4.46%	5.44%	6.27%	7.85%	9.33%	11.01%	12.88%	14.93%	16.57%	18.05%	21.10%	22.66%	24.26%	25.73%

Policy #	YEAR																			
	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
1	53.91%	57.03%	60.34%	63.84%	67.54%	71.46%	75.60%	79.99%	84.63%	89.54%	94.73%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
2	24.27%	25.73%	27.25%	28.86%	30.56%	32.35%	34.26%	36.27%	38.41%	40.66%	43.02%	45.52%	48.16%	50.95%	53.91%	57.03%	60.34%	63.84%	67.54%	71.46%
3	20.43%	22.41%	24.56%	26.94%	29.52%	32.39%	35.49%	38.84%	42.26%	45.76%	49.29%	52.95%	56.70%	60.30%	63.80%	67.00%	71.45%	75.60%	79.90%	84.60%
4	16.98%	18.63%	20.43%	22.41%	24.59%	26.94%	29.55%	32.39%	35.49%	38.84%	42.26%	45.76%	49.29%	52.95%	56.70%	60.30%	63.80%	67.00%	71.45%	75.60%
5	16.98%	18.63%	20.43%	22.41%	24.59%	26.94%	29.55%	32.39%	35.49%	38.84%	42.26%	45.76%	49.29%	52.95%	56.70%	60.30%	63.80%	67.00%	71.45%	75.60%
6	30.56%	32.35%	34.26%	36.27%	38.41%	40.66%	43.02%	45.52%	48.16%	50.95%	53.91%	57.03%	60.34%	63.84%	67.54%	71.46%	75.60%	79.99%	84.63%	89.54%
7	35.49%	38.84%	42.26%	45.76%	49.29%	52.95%	56.70%	60.30%	63.80%	67.00%	71.45%	75.60%	79.90%	84.60%	88.95%	93.36%	100.00%	100.00%	100.00%	100.00%
8	27.25%	28.86%	30.56%	32.35%	34.26%	36.27%	38.41%	40.66%	43.02%	45.52%	48.16%	50.95%	53.91%	57.03%	60.34%	63.84%	67.54%	71.46%	75.60%	79.99%
9	34.26%	36.27%	38.41%	40.66%	43.02%	45.52%	48.16%	50.95%	53.91%	57.03%	60.34%	63.84%	67.54%	71.46%	75.60%	79.99%	84.63%	89.54%	94.73%	100.00%
10	28.86%	32.35%	32.35%	34.26%	36.27%	38.41%	40.66%	43.02%	45.52%	48.16%	50.95%	53.91%	57.03%	60.34%	63.84%	67.54%	71.46%	75.60%	79.99%	84.63%
11	30.56%	32.35%	34.26%	36.27%	38.41%	40.66%	43.02%	45.52%	48.16%	50.95%	53.91%	57.03%	60.34%	63.84%	67.54%	71.46%	75.60%	79.99%	84.63%	89.54%
12	36.27%	38.41%	40.66%	43.02%	45.52%	48.16%	50.95%	53.91%	57.03%	60.34%	63.84%	67.54%	71.46%	75.60%	79.99%	84.63%	89.54%	94.73%	100.00%	100.00%
13	20.43%	22.41%	24.56%	26.94%	29.52%	32.39%	35.49%	38.84%	42.26%	45.76%	49.29%	52.95%	56.70%	60.30%	63.80%	67.00%	71.45%	75.60%	79.90%	84.60%
14	32.35%	34.26%	36.27%	38.41%	40.66%	43.02%	45.52%	48.16%	50.95%	53.91%	57.03%	60.34%	63.84%	67.54%	71.46%	75.60%	79.99%	84.63%	89.54%	94.73%
15	38.41%	40.66%	43.02%	45.52%	48.16%	50.95%	53.91%	57.03%	60.34%	63.84%	67.54%	71.46%	75.60%	79.99%	84.63%	89.54%	94.73%	100.00%	100.00%	100.00%
16	40.66%	43.02%	45.52%	48.16%	50.95%	53.91%	57.03%	60.34%	63.84%	67.54%	71.46%	75.60%	79.99%	84.63%	89.54%	94.73%	100.00%	100.00%	100.00%	100.00%
17	21.14%	22.67%	24.28%	25.73%	27.25%	28.86%	30.56%	32.35%	34.26%	36.27%	38.41%	40.66%	43.02%	45.52%	48.16%	50.95%	53.91%	57.03%	60.34%	63.84%
18	22.41%	24.56%	26.94%	29.52%	32.32%	35.49%	38.84%	42.26%	45.76%	49.29%	52.95%	56.70%	60.30%	63.80%	67.00%	71.45%	75.60%	79.90%	84.60%	88.95%
19	22.41%	24.56%	26.94%	29.52%	32.32%	35.49%	38.84%	42.26%	45.76%	49.29%	52.95%	56.70%	60.30%	63.80%	67.00%	71.45%	75.60%	79.90%	84.60%	88.95%
20	27.25%	28.86%	30.56%	32.35%	34.26%	36.27%	38.41%	40.66%	43.02%	45.52%	48.16%	50.95%	53.91%	57.03%	60.34%	63.84%	67.54%	71.46%	75.60%	79.99%

LE<sub>standard</sub> = 11.52 years\*

Step 2  
Cash Flow Based on Standard Mortality Matrix (VBT 2001) – Used for Calculating Portfolio LE, LE<sub>standard</sub>

Policy #	YEAR																			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
1	\$39,132	\$52,733	\$69,980	\$74,311	\$75,574	\$64,399	\$53,711	\$43,357	\$34,304	\$26,558	\$20,071	\$14,799	\$10,624	\$7,408	\$5,005	\$3,267	\$2,051	\$1,236	\$713	\$391
2	2,172	2,706	3,485	4,272	4,722	5,467	6,036	6,579	7,896	8,990	10,185	11,313	12,309	13,069	13,503	13,578	12,389	11,106	10,615	8,977
3	20,540	24,466	30,146	37,419	46,167	56,048	66,892	78,252	89,531	100,428	109,918	117,870	118,284	117,437	115,117	111,768	106,991	100,938	93,605	85,341
4	7,870	9,138	11,216	14,071	17,660	21,894	26,663	31,844	37,257	42,657	47,782	52,437	54,089	55,062	55,194	54,798	53,771	52,199	49,960	47,127
5	2,099	2,437	2,991	3,752	4,709	5,838	7,110	8,492	9,935	11,375	12,742	13,983	14,424	14,683	14,718	14,613	14,339	13,920	13,323	12,567
6	91,980	133,532	180,472	230,725	264,331	321,415	353,297	417,070	419,982	458,172	485,246	499,311	494,032	472,127	458,496	388,667	322,557	259,174	204,186	157,334
7	106,100	171,874	195,067	219,014	244,519	270,462	294,865	315,983	331,672	340,742	341,646	334,249	310,445	283,178	252,898	221,063	188,192	155,577	124,725	95,365
8	33,225	47,179	61,033	74,709	85,080	94,846	111,214	132,001	141,019	165,520	181,328	193,921	201,884	204,021	192,611	175,027	167,638	142,026	117,638	94,485
9	46,140	71,808	99,892	129,259	158,484	185,759	189,518	201,403	208,439	218,158	219,108	219,629	221,099	187,509	155,695	125,178	98,682	76,167	57,460	42,258
10	6,105	8,777	11,570	14,576	16,436	19,042	22,886	24,798	29,377	32,291	34,537	35,957	36,345	34,317	31,188	29,880	25,323	21,008	16,874	13,274
11	7,884	11,446	15,469	19,776	22,657	27,550	30,283	35,749	35,996	39,272	41,593	42,798	42,346	40,468	39,300	33,314	27,648	22,215	17,502	13,486
12	8,530	13,761	19,285	24,847	30,125	32,785	34,906	36,209	34,407	38,900	39,034	39,302	33,338	27,687	22,266	17,558	13,556	10,230	7,531	5,395
13	10,270	12,233	15,073	18,710	23,083	28,024	33,446	39,126	44,766	50,214	54,959	58,935	59,142	58,718	57,558	55,884	53,495	50,469	46,803	42,671
14	7,065	10,603	14,537	18,754	23,080	25,727	30,277	30,691	32,555	34,804	36,053	35,924	34,756	34,729	29,447	24,444	19,648	15,485	11,947	9,003
15	19,650	32,175	44,896	57,123	68,124	72,614	75,501	71,892	81,572	82,145	82,718	70,179	58,238	46,891	36,987	28,564	21,562	15,878	11,383	7,925
16	70,650	113,952	156,311	195,230	227,931	237,589	226,651	257,833	260,367	262,793	222,995	185,276	149,059	117,597	90,839	68,589	50,522	36,232	25,238	17,031
17	6,208	9,184	11,753	13,935	15,846	17,678	19,622	23,178	24,806	29,127	33,501	37,930	42,311	46,364	49,756	52,086	52,110	48,962	45,178	41,289
18	21,600	28,904	35,325	43,356	52,757	63,341	74,663	86,187	97,481	107,904	116,771	122,936	122,069	116,193	116,193	111,357	104,947	97,443	88,750	79,325
19	21,600	28,904	35,325	43,356	52,757	63,341	74,663	86,187	97,481	107,904	116,771	122,936	122,069	116,193	116,193	111,357	104,947	97,443	88,750	79,325
20	33,225	47,179	61,033	74,709	85,080	94,846	111,214	132,001	141,019	165,520	181,328	193,921	201,884	204,021	192,611	175,027	167,638	142,026	117,638	94,485
<b>Death Benefits</b>	<b>\$562,044</b>	<b>\$832,991</b>	<b>\$1,074,861</b>	<b>\$1,311,904</b>	<b>\$1,519,133</b>	<b>\$1,708,665</b>	<b>\$1,843,418</b>	<b>\$2,058,630</b>	<b>\$2,159,831</b>	<b>\$2,323,476</b>	<b>\$2,388,287</b>	<b>\$2,403,605</b>	<b>\$2,338,806</b>	<b>\$2,204,878</b>	<b>\$2,045,577</b>	<b>\$1,816,017</b>	<b>\$1,608,005</b>	<b>\$1,369,734</b>	<b>\$1,149,818</b>	<b>\$947,053</b>

Policy #	YEAR																			
	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
1	\$203	\$99	\$45	\$19	\$7	\$2	\$1	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2	7,435	5,969	4,695	3,617	2,725	2,004	1,435	999	674	440	276	166	96	53	27	13	6	3	1	0
3	76,183	66,490	56,532	46,781	37,453	28,955	21,454	15,143	10,079	6,302	3,681	2,006	1,010	465	195	74	26	8	2	0
4	43,694	39,788	35,519	31,000	26,382	21,804	17,474	13,490	9,985	7,055	4,696	2,896	1,715	934	471	217	91	35	12	4
5	11,652	9,472	8,267	7,035	5,814	4,660	3,597	2,665	1,881	1,252	783	457	263	110	42	15	4	1	0	0
6	118,530	87,160	62,430	43,458	29,322	19,122	12,004	7,237	4,171	2,288	1,187	579	263	110	42	15	4	1	0	0
7	71,821	50,696	33,742	21,099	12,324	6,715	3,383	1,558	654	249	88	26	7	1	0	0	0	0	0	0
8	74,309	57,247	43,128	31,713	22,715	15,812	10,669	6,958	4,368	2,633	1,518	833	432	211	96	40	15	5	2	0
9	30,268	21,070	14,216	9,271	5,820	3,509	2,022	1,109	576	281	128	54	20	7	2	1	0	0	0	0
10	10,226	7,704	5,665	4,058	2,825	1,906	1,243	780	470	271	149	77	38	17	7	3	1	0	0	0
11	10,160	7,471	5,351	3,725	2,513	1,639	1,029	620	358	196	102	50	23	9	4	1	0	0	0	0
12	3,755	2,534	1,652	1,037	625	360	198	103	50	23	10	4	1	1	0	0	0	0	0	0
13	38,091	33,245	28,266	23,391	18,726	14,477	10,727	7,572	5,040	3,151	1,841	1,003	505	233	98	37	13	4	1	0
14	6,620	4,742	3,301	2,227	1,452	912	550	317	174	90	44	20	8	3	1	0	0	0	0	0
15	5,347	3,487	2,189	1,320	761	417	217	106	48	20	8	3	1	0	0	0	0	0	0	0
16	11,106	6,972	4,203	2,423	1,329	690	336	153	64	25	8	3	1	0	0	0	0	0	0	0
17	37,880	32,031	26,530	21,290	16,744	12,899	9,718	7,146	5,118	3,563	2,404	1,568	984	593	342	188	97	47	22	9
18	69,232	58,863	48,711	38,998	30,089	22,360	15,783	10,505	6,569	3,837	2,090	1,053	485	204	77	27	8	2	0	0
19	69,232	58,863	48,711	38,998	30,089	22,360	15,783	10,505	6,569	3,837	2,090	1,053	485	204	77	27	8	2	0	0
20	74,309	57,247	43,128	31,713	22,715	15,812	10,669	6,958	4,368	2,633	1,518	833	432	211	96	40	15	5	2	0
<b>Death Benefits</b>	<b>\$770,054</b>	<b>\$612,288</b>	<b>\$477,484</b>	<b>\$364,402</b>	<b>\$271,652</b>	<b>\$197,569</b>	<b>\$139,353</b>	<b>\$94,854</b>	<b>\$62,009</b>	<b>\$38,775</b>	<b>\$23,089</b>	<b>\$13,048</b>	<b>\$6,964</b>	<b>\$3,506</b>	<b>\$1,662</b>	<b>\$741</b>	<b>\$311</b>	<b>\$122</b>	<b>\$45</b>	<b>\$16</b>

\*LE =  $\left[ \sum_{t=1}^{40} \text{Death Benefits}_t \times (t - 0.5) \right] / 36,744,886$

## Step 3

Policy #	Death Benefits	Gender	Age	LE	Mortality Multiplier (MM)
1	\$600,000	M	89	74	82%
2	200,000	M	75	120	220%
3	2,000,000	F	78	140	155%
4	1,000,000	F	76	130	235%
5	266,666	F	76	160	144%
6	7,000,000	M	79	120	133%
7	5,000,000	F	84	87	197%
8	2,889,110	M	77	125	157%
9	3,000,000	M	81	100	150%
10	500,000	M	78	120	150%
11	600,000	M	79	120	133%
12	500,000	M	82	100	133%
13	1,000,000	F	78	90	408%
14	500,000	M	80	100	173%
15	1,000,000	M	83	80	180%
16	3,000,000	M	84	84	140%
17	800,000	M	73	100	415%
18	2,000,000	F	79	110	235%
19	2,000,000	F	79	100	290%
20	2,889,110	M	77	120	172%

**Step 4  
Impaired Mortality Matrix**

Policy #	Year																			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
1	5.38%	7.78%	11.44%	14.14%	17.38%	18.72%	20.14%	21.43%	22.79%	24.23%	25.74%	27.34%	29.04%	30.85%	32.78%	34.82%	36.95%	39.22%	41.65%	44.24%
2	2.37%	2.95%	3.89%	4.84%	5.46%	6.47%	7.34%	8.26%	10.25%	12.19%	14.55%	17.21%	20.21%	23.52%	27.12%	31.06%	33.29%	35.57%	40.69%	43.19%
3	1.59%	1.91%	2.38%	3.00%	3.77%	4.68%	5.75%	6.97%	8.33%	9.86%	11.50%	13.30%	14.59%	16.00%	17.49%	19.16%	20.96%	22.92%	25.03%	27.35%
4	1.84%	2.15%	2.66%	3.37%	4.28%	5.39%	6.69%	8.19%	9.89%	11.77%	13.81%	16.03%	17.71%	19.47%	21.27%	23.22%	25.31%	27.59%	30.03%	32.65%
5	1.13%	1.32%	1.64%	2.08%	2.64%	3.34%	4.15%	5.10%	6.18%	7.38%	8.70%	10.15%	11.26%	12.43%	13.63%	14.95%	16.38%	17.95%	19.65%	21.51%
6	1.74%	2.56%	3.53%	4.63%	5.49%	6.95%	8.05%	10.09%	11.00%	13.06%	15.32%	17.80%	20.33%	22.96%	26.97%	28.87%	30.86%	32.63%	34.49%	36.42%
7	4.14%	6.80%	7.97%	9.31%	10.87%	12.69%	14.74%	17.01%	19.49%	22.18%	25.04%	28.10%	30.61%	33.31%	36.19%	39.31%	42.61%	46.08%	49.81%	53.26%
8	1.80%	2.56%	3.39%	4.24%	4.95%	5.69%	6.91%	8.56%	9.66%	12.04%	14.25%	16.73%	19.46%	22.43%	24.76%	26.84%	31.07%	33.19%	35.36%	37.32%
9	2.30%	3.62%	5.15%	6.89%	8.83%	10.96%	12.06%	13.91%	15.85%	18.52%	21.21%	24.75%	29.80%	31.85%	33.99%	35.89%	37.87%	39.95%	42.13%	44.36%
10	1.83%	2.65%	3.56%	4.58%	5.32%	6.38%	8.00%	9.14%	11.49%	13.65%	16.03%	18.66%	21.52%	23.77%	25.79%	28.88%	31.94%	34.08%	35.99%	37.95%
11	1.74%	2.56%	3.53%	4.63%	5.49%	6.95%	8.05%	10.09%	11.00%	13.06%	15.32%	17.80%	20.33%	22.96%	26.97%	28.87%	30.86%	32.63%	34.49%	36.42%
12	2.26%	3.71%	5.33%	7.14%	9.13%	10.66%	12.33%	14.08%	14.98%	19.02%	22.27%	26.90%	28.80%	30.78%	32.55%	34.40%	36.35%	38.40%	40.54%	42.76%
13	4.12%	4.95%	6.14%	7.70%	9.61%	11.85%	14.43%	17.32%	20.47%	23.91%	27.50%	31.31%	33.98%	36.80%	39.72%	42.88%	46.17%	49.61%	53.16%	56.87%
14	2.43%	3.69%	5.16%	6.83%	8.73%	10.22%	12.72%	13.91%	16.01%	18.81%	21.82%	24.87%	28.14%	33.53%	35.77%	38.09%	40.14%	42.28%	44.51%	46.78%
15	3.51%	5.83%	8.36%	11.09%	14.02%	16.17%	18.43%	19.60%	24.76%	28.87%	34.54%	36.83%	39.20%	41.29%	43.46%	45.72%	48.06%	50.49%	52.99%	55.56%
16	3.28%	5.40%	7.69%	10.13%	12.71%	14.55%	15.51%	19.76%	23.22%	28.06%	30.02%	32.07%	33.89%	35.80%	37.81%	39.91%	42.10%	44.39%	46.78%	49.26%
17	3.18%	4.71%	6.07%	7.27%	8.38%	9.51%	10.76%	12.94%	14.24%	17.13%	20.33%	23.91%	27.94%	32.40%	37.24%	42.37%	47.06%	50.44%	53.87%	57.71%
18	2.52%	3.40%	4.21%	5.24%	6.50%	8.00%	9.71%	11.64%	13.78%	16.13%	18.65%	21.25%	23.20%	25.29%	27.54%	30.00%	32.59%	35.39%	38.36%	41.56%
19	3.10%	4.18%	5.16%	6.43%	7.96%	9.77%	11.85%	14.16%	16.72%	19.51%	22.49%	25.53%	27.80%	30.22%	32.81%	35.61%	38.53%	41.67%	44.96%	48.46%
20	1.97%	2.82%	3.71%	4.63%	5.41%	6.22%	7.55%	9.34%	10.54%	13.12%	15.51%	18.17%	21.11%	24.29%	26.78%	29.00%	33.48%	35.72%	38.00%	40.05%

Policy #	Year																			
	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
1	47.01%	49.97%	53.16%	56.57%	60.25%	64.23%	68.55%	73.27%	78.47%	84.29%	91.05%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
2	45.75%	48.03%	50.34%	52.72%	55.17%	57.68%	60.26%	62.89%	65.57%	68.28%	70.99%	73.71%	76.43%	79.13%	81.80%	84.41%	86.93%	89.33%	91.59%	93.66%
3	29.83%	32.52%	35.39%	38.53%	41.86%	45.48%	49.31%	53.33%	57.31%	61.26%	65.09%	68.92%	72.67%	76.11%	79.30%	82.07%	85.67%	88.77%	91.68%	94.50%
4	35.42%	38.39%	41.56%	44.92%	48.47%	52.18%	56.10%	60.14%	64.30%	68.50%	72.49%	76.25%	79.72%	83.00%	86.01%	88.59%	90.82%	92.61%	94.74%	96.37%
5	23.51%	25.68%	28.05%	30.61%	33.39%	36.37%	39.62%	43.08%	46.81%	50.73%	54.65%	58.56%	62.38%	66.23%	70.03%	73.56%	76.85%	79.74%	83.55%	86.88%
6	38.43%	40.54%	42.76%	45.08%	47.51%	50.05%	52.67%	55.41%	58.26%	61.22%	64.30%	67.48%	70.77%	74.15%	77.61%	81.13%	84.68%	88.23%	91.71%	95.03%
7	57.84%	62.03%	66.11%	70.04%	73.75%	77.36%	80.77%	83.80%	86.49%	88.74%	91.54%	93.79%	95.76%	97.49%	98.70%	99.52%	100.00%	100.00%	100.00%	100.00%
8	39.31%	41.40%	43.59%	45.86%	48.24%	50.71%	53.27%	55.93%	58.65%	61.46%	64.35%	67.32%	70.36%	73.45%	76.59%	79.75%	82.91%	86.03%	89.08%	92.00%
9	46.70%	49.13%	51.66%	54.29%	56.99%	59.78%	62.67%	65.65%	68.70%	71.83%	75.02%	78.25%	81.51%	84.75%	87.95%	91.05%	93.97%	96.62%	98.79%	100.00%
10	39.99%	42.13%	44.36%	46.70%	49.13%	51.66%	54.29%	56.99%	59.78%	62.67%	65.65%	68.70%	71.83%	75.02%	78.25%	81.51%	84.75%	87.95%	91.05%	93.97%
11	38.43%	40.54%	42.76%	45.08%	47.51%	50.05%	52.67%	55.41%	58.26%	61.22%	64.30%	67.48%	70.77%	74.15%	77.61%	81.13%	84.68%	88.23%	91.71%	95.03%
12	45.08%	47.51%	50.05%	52.67%	55.41%	58.26%	61.22%	64.30%	67.48%	70.77%	74.15%	77.61%	81.13%	84.68%	88.23%	91.71%	95.03%	98.00%	100.00%	100.00%
13	60.65%	64.49%	68.33%	72.22%	76.01%	79.75%	83.28%	86.54%	89.36%	91.76%	93.74%	95.39%	96.71%	97.69%	98.42%	98.91%	99.40%	99.68%	99.86%	99.95%
14	49.15%	51.60%	54.14%	56.76%	59.46%	62.21%	65.03%	67.91%	70.84%	73.81%	76.81%	79.81%	82.79%	85.72%	88.57%	91.29%	93.82%	96.08%	97.99%	99.39%
15	58.20%	60.92%	63.67%	66.48%	69.35%	72.26%	75.19%	78.14%	81.07%	83.97%	86.81%	89.53%	92.11%	94.48%	96.56%	98.28%	99.50%	100.00%	100.00%	100.00%
16	51.84%	54.50%	57.27%	60.14%	63.11%	66.18%	69.35%	72.60%	75.93%	79.30%	82.71%	86.12%	89.49%	92.73%	95.76%	98.38%	100.00%	100.00%	100.00%	100.00%
17	62.68%	65.59%	68.47%	70.90%	73.29%	75.66%	77.98%	80.25%	82.46%	84.59%	86.62%	88.54%	90.31%	91.96%	93.45%	94.80%	95.98%	97.00%	97.85%	98.53%
18	44.92%	48.44%	52.18%	56.06%	60.05%	64.30%	68.50%	72.49%	76.25%	79.72%	83.00%	86.01%	88.59%	90.82%	92.61%	94.74%	96.37%	97.70%	98.77%	99.43%
19	52.09%	55.84%	59.76%	63.75%	67.77%	71.95%	75.96%	79.66%	83.04%	86.04%	88.77%	91.17%	93.14%	94.75%	95.96%	97.36%	98.33%	99.05%	99.56%	99.83%
20	42.14%	44.32%	46.59%	48.95%	51.39%	53.93%	56.55%	59.25%	62.00%	64.81%	67.69%	70.63%	73.61%	76.61%	79.62%	82.61%	85.56%	88.43%	91.16%	93.72%

Step 5

Cash Flow Based on Impaired Mortality Matrix – Used for Calculating Impaired Portfolio LE, LE<sub>Impaired</sub>

LE<sub>Impaired</sub> = 8.98 years

Policy #	YEAR																			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
1	\$32,282	\$44,154	\$59,902	\$65,539	\$69,194	\$61,589	\$53,854	\$45,747	\$38,230	\$31,385	\$25,259	\$19,923	\$15,377	\$11,590	\$8,513	\$6,080	\$4,205	\$2,815	\$1,816	\$1,126
2	4,747	5,828	7,363	8,809	9,460	10,592	11,249	11,728	13,351	14,247	14,930	15,095	14,675	13,626	12,016	10,027	7,409	5,280	3,893	2,451
3	31,747	37,579	45,949	56,486	68,846	82,314	96,393	110,169	122,544	132,893	139,749	142,998	136,066	127,379	117,018	105,757	93,525	80,830	68,032	55,713
4	18,396	21,113	25,556	31,504	38,663	46,588	54,745	62,546	69,307	74,307	76,956	76,986	71,432	64,630	56,855	48,869	40,894	33,294	26,233	19,956
5	3,017	3,490	4,264	5,319	6,627	8,139	9,798	11,533	13,257	14,857	16,221	17,272	17,211	16,860	16,196	15,341	14,291	13,100	11,767	10,347
6	122,067	176,258	236,398	299,122	338,312	404,885	436,534	503,346	493,020	521,102	531,399	522,871	490,992	441,776	399,694	312,473	237,552	173,673	123,672	85,523
7	206,865	325,969	356,254	382,607	405,406	421,634	427,556	420,894	400,180	366,594	322,083	270,842	212,142	160,223	116,081	80,453	52,924	32,852	19,146	10,277
8	51,992	73,237	93,707	113,098	126,620	138,381	159,477	182,687	188,523	212,263	220,965	222,348	215,359	199,915	171,231	139,673	118,260	87,089	61,979	42,280
9	66,943	106,229	145,583	184,531	220,179	249,286	244,189	247,776	243,058	238,950	222,979	204,976	185,720	139,365	101,356	70,651	47,807	31,332	19,837	12,090
10	9,129	13,026	16,983	21,113	23,408	26,581	31,162	32,774	37,447	39,363	39,913	39,008	36,600	31,733	26,226	22,563	16,912	12,283	8,550	5,770
11	10,463	15,108	20,263	25,639	28,998	34,704	37,417	43,144	42,259	44,666	45,549	44,818	42,085	37,867	34,259	26,763	20,362	14,886	10,600	7,331
12	11,313	18,114	25,086	31,822	37,780	40,068	41,391	41,457	37,891	40,914	38,777	36,422	28,469	21,687	15,874	11,318	7,844	5,273	3,430	2,151
13	41,244	47,437	55,987	65,837	75,871	84,561	90,763	93,222	91,108	84,622	74,076	61,145	45,580	32,584	22,229	14,464	8,896	5,146	2,779	1,392
14	12,159	18,011	24,228	30,451	36,234	38,716	43,286	41,313	40,933	40,380	38,022	33,883	28,807	24,669	17,493	11,965	7,807	4,922	2,991	1,745
15	35,092	56,253	75,973	92,378	103,809	102,910	98,364	85,295	86,635	76,006	64,697	45,149	30,353	19,440	12,015	7,147	4,078	2,225	1,156	570
16	98,442	156,780	210,950	256,565	288,376	289,302	263,451	283,623	267,377	248,122	190,953	142,727	102,464	71,558	48,509	31,845	20,189	12,326	7,223	4,048
17	25,450	36,518	44,810	50,416	53,896	56,001	57,323	61,541	58,961	60,843	59,816	56,056	49,842	41,643	32,357	23,104	14,788	8,391	4,440	2,195
18	50,390	66,278	79,217	94,564	111,143	127,803	142,847	154,559	161,708	163,134	158,242	146,664	126,095	105,550	85,884	67,781	51,534	37,732	26,419	17,644
19	61,999	80,976	95,912	113,206	131,186	148,224	162,127	170,860	173,187	168,242	156,096	137,372	111,386	87,398	66,213	48,290	33,646	22,369	14,075	8,382
20	56,910	79,996	102,059	122,723	136,780	148,706	169,248	193,611	197,984	220,491	226,472	224,270	213,138	193,486	161,538	128,079	104,990	74,520	50,360	33,303
<b>Death Benefits</b>	<b>\$952,648</b>	<b>\$1,382,354</b>	<b>\$1,726,465</b>	<b>\$2,051,728</b>	<b>\$2,311,787</b>	<b>\$2,520,984</b>	<b>\$2,630,175</b>	<b>\$2,797,826</b>	<b>\$2,776,960</b>	<b>\$2,793,382</b>	<b>\$2,663,156</b>	<b>\$2,460,824</b>	<b>\$2,173,824</b>	<b>\$1,842,981</b>	<b>\$1,521,570</b>	<b>\$1,182,663</b>	<b>\$907,915</b>	<b>\$660,338</b>	<b>\$469,996</b>	<b>\$324,261</b>

Policy #	YEAR																			
	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
1	\$667	\$376	\$200	\$100	\$46	\$20	\$7	\$3	\$1	\$0	\$0	\$0	—	—	—	—	—	—	—	—
2	1,475	840	457	238	118	55	24	10	4	1	0	0	0	0	0	0	0	0	0	0
3	44,156	33,774	24,805	17,444	11,651	7,360	4,350	2,385	1,196	546	225	83	27	8	2	0	0	0	0	0
4	14,584	10,207	6,807	4,300	2,556	1,418	729	343	146	56	19	5	1	0	0	0	0	0	0	0
5	8,877	7,418	6,020	4,728	3,579	2,596	1,800	1,182	731	421	224	109	48	19	7	2	1	0	0	0
6	57,385	37,275	23,375	14,108	8,166	4,516	2,374	1,182	554	243	99	37	13	4	1	0	0	0	0	0
7	5,215	2,859	954	343	108	30	7	1	0	0	0	0	0	0	0	0	0	0	0	0
8	27,922	17,846	11,008	6,534	3,720	2,024	1,048	514	238	103	42	15	5	2	0	0	0	0	0	0
9	7,080	3,971	2,124	1,079	518	234	98	39	14	5	1	0	0	0	0	0	0	0	0	0
10	3,773	2,385	1,454	851	477	255	130	62	28	12	5	2	1	0	0	0	0	0	0	0
11	4,919	3,195	2,004	1,209	700	387	203	101	47	21	8	3	1	0	0	0	0	0	0	0
12	1,298	751	416	218	109	51	22	9	3	1	0	0	0	0	0	0	0	0	0	0
13	640	268	101	34	10	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0
14	975	521	264	127	58	24	4	1	0	0	0	0	0	0	0	0	0	0	0	0
15	265	116	47	18	6	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0
16	2,162	1,094	523	235	98	38	13	4	1	0	0	0	0	0	0	0	0	0	0	0
17	1,008	394	141	46	14	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0
18	11,145	6,620	3,677	1,889	889	380	145	48	14	3	1	0	0	0	0	0	0	0	0	0
19	4,627	2,376	1,123	482	186	64	19	5	1	0	0	0	0	0	0	0	0	0	0	0
20	21,007	12,782	7,481	4,198	2,250	1,148	554	252	108	43	16	5	2	0	0	0	0	0	0	0

Step #6

$80\% * LE_{\text{Standard}} = 80\% * (11.52 \text{ years}) = 9.22 \text{ years}$   
 $LE_{\text{Impaired}} = 8.98 \text{ years}$   
 Therefore,  $LE_{\text{Impaired}} <= 80\% * LE_{\text{Standard}}$

Step #7

Intermediate Mortality Matrix

$80\% * LE_{\text{Standard}} = 80\% * (11.52 \text{ years}) = 9.22 \text{ years}$   
 $LE_{\text{Intermediate}} = 9.22 \text{ years}$   
 Therefore, Factor = 94.5%

Policy #	YEAR																			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
1	5.09%	7.37%	10.85%	13.41%	16.51%	17.79%	19.15%	20.38%	21.69%	23.07%	24.52%	26.06%	27.69%	29.44%	31.29%	33.27%	35.33%	37.54%	39.89%	42.42%
2	2.24%	2.82%	3.68%	4.58%	5.17%	6.12%	6.95%	7.83%	9.72%	11.56%	13.81%	16.35%	19.22%	22.39%	25.84%	29.63%	31.79%	33.99%	38.96%	41.39%
3	1.50%	1.81%	2.25%	2.83%	3.56%	4.43%	5.44%	6.60%	7.89%	9.34%	10.90%	12.61%	13.85%	15.19%	16.62%	18.21%	19.94%	21.81%	23.84%	26.06%
4	1.74%	2.03%	2.52%	3.19%	4.05%	5.10%	6.33%	7.76%	9.37%	11.16%	13.10%	15.22%	16.82%	18.51%	20.23%	22.10%	24.11%	26.30%	28.64%	31.17%
5	1.07%	1.25%	1.55%	1.97%	2.50%	3.16%	3.93%	4.83%	5.85%	6.99%	8.25%	9.62%	10.67%	11.79%	12.93%	14.19%	15.55%	17.05%	18.66%	20.46%
6	1.65%	2.42%	3.34%	4.38%	5.19%	6.58%	7.62%	9.57%	10.43%	12.39%	14.54%	16.91%	19.33%	21.85%	25.70%	27.53%	29.44%	31.15%	32.95%	34.81%
7	3.91%	6.44%	7.55%	8.82%	10.31%	12.03%	13.99%	16.16%	18.53%	21.10%	23.85%	26.78%	29.20%	31.81%	34.59%	37.62%	40.83%	44.22%	47.87%	51.27%
8	1.70%	2.44%	3.21%	4.01%	4.69%	5.39%	6.55%	8.11%	9.16%	11.42%	13.53%	15.89%	18.49%	21.33%	23.57%	25.58%	29.64%	31.69%	33.79%	35.68%
9	2.17%	3.43%	4.88%	6.52%	8.36%	10.39%	11.43%	13.20%	15.05%	17.60%	20.17%	23.56%	28.42%	30.40%	32.46%	34.30%	36.23%	38.24%	40.36%	42.54%
10	1.73%	2.51%	3.36%	4.33%	5.04%	6.04%	7.57%	8.66%	10.90%	12.95%	15.22%	17.73%	20.47%	22.63%	24.56%	28.50%	30.49%	32.56%	34.40%	36.30%
11	1.65%	2.42%	3.34%	4.38%	5.19%	6.58%	7.62%	9.57%	10.43%	12.39%	14.54%	16.91%	19.33%	21.85%	25.70%	27.53%	29.44%	31.15%	32.95%	34.81%
12	3.51%	3.51%	5.05%	6.76%	8.65%	10.10%	11.69%	13.36%	14.22%	16.08%	21.18%	25.63%	27.46%	29.37%	31.07%	32.87%	34.75%	36.73%	38.81%	40.97%
13	3.90%	4.68%	5.82%	7.29%	9.11%	11.24%	13.69%	16.45%	19.46%	22.75%	26.21%	29.88%	32.46%	35.18%	38.02%	41.09%	44.30%	47.68%	51.17%	54.83%
14	2.30%	3.49%	4.88%	6.47%	8.27%	9.68%	12.07%	13.20%	15.20%	17.87%	20.75%	23.67%	26.82%	32.02%	34.18%	36.43%	38.43%	40.51%	42.68%	44.91%
15	3.32%	5.52%	7.92%	10.52%	13.31%	15.35%	17.52%	18.63%	23.57%	27.52%	33.00%	35.21%	37.51%	39.54%	41.66%	43.86%	46.16%	48.54%	51.00%	53.53%
16	3.10%	5.11%	7.28%	9.60%	12.05%	13.81%	14.72%	18.79%	22.10%	26.75%	28.64%	30.61%	32.37%	34.22%	36.16%	38.20%	40.33%	42.57%	44.90%	47.33%
17	3.01%	4.46%	5.75%	6.89%	7.94%	9.01%	10.20%	12.27%	13.51%	16.27%	19.33%	22.76%	26.63%	30.93%	35.61%	40.60%	45.18%	48.49%	51.86%	55.66%
18	3.22%	3.22%	3.98%	4.96%	6.15%	7.57%	9.20%	11.04%	13.08%	15.31%	17.72%	20.21%	22.08%	24.08%	26.25%	28.62%	31.11%	33.82%	36.70%	39.81%
19	2.93%	3.95%	4.89%	6.09%	7.54%	9.26%	11.23%	13.44%	15.88%	18.54%	21.40%	24.32%	26.50%	28.82%	31.32%	34.03%	36.86%	39.92%	43.12%	46.55%
20	1.86%	2.67%	3.51%	4.38%	5.12%	5.89%	7.15%	8.85%	9.99%	12.44%	14.72%	17.26%	20.07%	23.12%	25.51%	27.65%	31.97%	34.14%	36.35%	38.34%

Policy #	YEAR																			
	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
1	45.13%	48.03%	51.16%	54.53%	58.18%	62.15%	66.48%	71.25%	76.57%	82.61%	89.78%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
2	43.90%	46.12%	48.39%	50.73%	53.14%	55.63%	58.19%	60.81%	63.49%	66.21%	68.95%	71.71%	74.48%	77.26%	80.01%	82.73%	85.38%	87.93%	90.36%	92.62%
3	28.45%	31.04%	33.82%	36.86%	40.10%	43.63%	47.38%	51.33%	55.27%	59.19%	63.01%	66.86%	70.65%	74.16%	77.43%	80.29%	84.06%	87.33%	90.46%	93.54%
4	33.85%	36.73%	39.81%	43.08%	46.56%	50.20%	54.07%	58.07%	62.22%	66.44%	70.47%	74.30%	77.86%	81.26%	84.41%	87.15%	89.53%	91.47%	93.82%	95.64%
5	22.37%	24.46%	26.73%	29.20%	31.88%	34.77%	37.92%	41.29%	44.93%	48.78%	52.64%	56.51%	60.31%	64.16%	67.98%	71.55%	74.91%	77.88%	81.84%	85.33%
6	36.76%	38.82%	40.97%	43.24%	45.61%	48.11%	50.69%	53.38%	56.21%	59.15%	62.22%	65.41%	68.72%	72.15%	75.69%	79.32%	83.02%	86.76%	90.50%	94.14%
7	55.76%	59.96%	64.03%	67.99%	71.75%	75.43%	78.94%	82.09%	84.92%	87.30%	90.31%	92.76%	94.96%	96.93%	98.34%	99.36%	100.00%	100.00%	100.00%	100.00%
8	37.62%	39.66%	41.78%	44.01%	46.33%	48.75%	51.28%	53.90%	56.59%	59.38%	62.27%	65.24%	68.31%	71.44%	74.64%	77.89%	81.16%	84.44%	87.67%	90.81%
9	44.82%	47.20%	49.69%	52.28%	54.95%	57.72%	60.59%	63.57%	66.64%	69.80%	73.04%	76.35%	79.71%	83.09%	86.46%	89.78%	92.97%	95.92%	98.46%	100.00%
10	38.26%	40.36%	42.54%	44.82%	47.20%	49.69%	52.28%	54.95%	57.72%	60.59%	63.57%	66.64%	69.80%	73.04%	76.35%	79.71%	83.09%	86.46%	89.78%	92.97%
11	36.76%	38.82%	40.97%	43.24%	45.61%	48.11%	50.69%	53.38%	56.21%	59.15%	62.22%	65.41%	68.72%	72.15%	75.69%	79.32%	83.02%	86.76%	90.50%	94.14%
12	43.24%	45.61%	48.11%	50.69%	53.38%	56.21%	59.15%	62.22%	65.41%	68.72%	72.15%	75.69%	79.32%	83.02%	86.76%	90.50%	94.14%	97.52%	100.00%	100.00%
13	58.57%	62.41%	66.27%	70.19%	74.05%	77.89%	81.55%	84.97%	87.97%	90.55%	92.70%	94.54%	96.03%	97.16%	98.01%	98.61%	99.20%	99.57%	99.79%	99.93%
14	47.22%	49.63%	52.13%	54.72%	57.40%	60.13%	62.95%	65.84%	68.79%	71.81%	74.87%	77.95%	81.04%	84.11%	87.12%	90.04%	92.79%	95.32%	97.50%	99.19%
15	56.15%	58.84%	61.59%	64.40%	67.29%	70.23%	73.22%	76.23%	79.26%	82.33%	85.25%	88.15%	90.92%	93.52%	95.86%	97.95%	99.33%	100.00%	100.00%	100.00%
16	49.87%	52.49%	55.22%	58.07%	61.03%	64.11%	67.29%	70.58%	73.96%	77.43%	80.96%	84.53%	88.10%	91.60%	94.95%	97.98%	100.00%	100.00%	100.00%	100.00%
17	60.60%	63.51%	66.40%	68.86%	71.28%	73.69%	76.07%	78.41%	80.70%	82.92%	85.05%	87.09%	88.99%	90.76%	92.39%	93.88%	95.20%	96.36%	97.34%	98.15%
18	43.08%	46.52%	50.20%	54.02%	57.98%	62.22%	66.44%	70.47%	74.30%	77.86%	81.26%	84.41%	87.15%	89.53%	91.47%	93.82%	95.64%	97.16%	98.43%	99.25%
19	50.12%	53.81%	57.70%	61.67%	65.92%	69.92%	74.00%	77.80%	81.33%	84.44%	87.33%	89.91%	92.05%	93.82%	95.21%	96.78%	98.17%	98.77%	99.41%	99.76%
20	40.37%	42.50%	44.72%	47.02%	49.43%	51.92%	54.51%	57.19%	59.92%	62.73%	65.62%	68.58%	71.60%	74.66%	77.76%	80.86%	83.94%	86.97%	89.90%	92.68%



## Step #8 Adjustment Factors Based on Face Value

Policy #	Face Value	Gender	Age	LE	Adjustment
1	\$600,000	M	89	74	100.00%
2	\$200,000	M	75	120	100.00%
3	\$2,000,000	F	78	140	100.00%
4	\$1,000,000	F	76	130	100.00%
5	\$266,666	F	76	160	100.00%
6	\$7,000,000	M	79	120	80.00%
7	\$5,000,000	F	84	87	88.00%
8	\$2,889,110	M	77	125	96.44%
9	\$3,000,000	M	81	100	96.00%
10	\$500,000	M	78	120	100.00%
11	\$600,000	M	79	120	100.00%
12	\$500,000	M	82	100	100.00%
13	\$1,000,000	F	78	90	100.00%
14	\$500,000	M	80	100	100.00%
15	\$1,000,000	M	83	80	100.00%
16	\$3,000,000	M	84	84	96.00%
17	\$800,000	M	73	100	100.00%
18	\$2,000,000	F	79	110	100.00%
19	\$2,000,000	F	79	100	100.00%
20	\$2,889,110	M	77	120	96.44%

**Step #8 (continued)  
Final Mortality Matrix**

Policy #	Year																			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
1	5.09%	7.37%	10.85%	13.41%	16.51%	17.79%	19.15%	20.38%	21.69%	23.07%	24.52%	26.06%	27.69%	29.44%	31.29%	33.27%	35.33%	37.54%	39.89%	42.42%
2	2.24%	2.82%	3.68%	4.58%	5.17%	6.12%	6.95%	7.83%	9.72%	11.56%	13.81%	16.35%	19.22%	22.39%	25.84%	29.63%	31.79%	33.99%	36.96%	41.39%
3	1.50%	1.81%	2.25%	2.83%	3.56%	4.43%	5.44%	6.60%	7.89%	9.34%	10.90%	12.61%	13.85%	15.19%	16.62%	18.21%	19.94%	21.81%	23.84%	26.06%
4	1.74%	2.03%	2.52%	3.19%	4.05%	5.10%	6.33%	7.76%	9.37%	11.16%	13.10%	15.22%	16.82%	18.51%	20.23%	22.10%	24.11%	26.30%	28.64%	31.17%
5	1.07%	1.25%	1.55%	1.97%	2.50%	3.16%	3.93%	4.83%	5.85%	6.99%	8.25%	9.62%	10.67%	11.79%	12.93%	14.19%	15.55%	17.05%	18.66%	20.46%
6	1.32%	1.94%	2.68%	3.52%	4.18%	5.30%	6.15%	7.73%	8.43%	10.04%	11.81%	13.77%	15.79%	17.90%	21.15%	22.71%	24.35%	25.82%	27.37%	28.99%
7	3.45%	5.69%	6.68%	7.80%	9.13%	10.67%	12.42%	14.37%	16.50%	18.83%	21.32%	23.99%	26.20%	28.60%	31.18%	33.98%	36.96%	40.17%	43.63%	46.88%
8	1.64%	2.36%	3.09%	3.87%	4.52%	5.20%	6.32%	7.83%	8.85%	11.04%	13.08%	15.37%	17.90%	20.66%	22.84%	24.79%	28.76%	30.76%	32.81%	34.87%
9	2.09%	3.29%	4.69%	6.27%	8.04%	10.00%	11.00%	12.71%	14.49%	16.96%	19.45%	22.73%	27.45%	29.38%	31.39%	33.19%	35.07%	37.04%	39.11%	41.25%
10	1.73%	2.51%	3.36%	4.33%	5.04%	6.04%	7.57%	8.66%	10.90%	12.95%	15.22%	17.73%	20.47%	22.63%	24.56%	28.50%	30.48%	32.56%	34.40%	36.30%
11	1.65%	2.42%	3.34%	4.38%	5.19%	6.58%	7.62%	9.57%	10.43%	12.39%	14.54%	16.91%	19.33%	21.85%	25.70%	27.53%	29.44%	31.15%	32.95%	34.81%
12	2.14%	3.51%	5.05%	6.76%	8.65%	10.10%	11.69%	13.36%	14.22%	18.08%	21.18%	25.63%	27.46%	29.37%	31.07%	32.87%	34.75%	36.73%	38.81%	40.97%
13	3.90%	4.68%	5.82%	7.29%	9.11%	11.24%	13.69%	16.45%	19.46%	22.75%	26.21%	29.88%	32.46%	35.18%	38.02%	41.09%	44.30%	47.68%	51.17%	54.83%
14	2.30%	3.49%	4.88%	6.47%	8.27%	9.68%	12.07%	13.20%	15.20%	17.87%	20.75%	23.67%	26.82%	32.02%	34.18%	36.43%	38.43%	40.51%	42.68%	44.91%
15	3.32%	5.52%	7.92%	10.52%	13.31%	15.35%	17.52%	18.63%	23.57%	27.52%	33.00%	35.21%	37.51%	39.54%	41.66%	43.86%	46.16%	48.54%	51.00%	53.53%
16	2.98%	4.91%	7.00%	9.23%	11.60%	13.30%	14.18%	18.11%	21.31%	25.83%	27.67%	29.59%	31.30%	33.11%	35.00%	37.00%	39.09%	41.28%	43.57%	45.96%
17	3.01%	4.46%	5.75%	6.89%	7.94%	9.01%	10.20%	12.27%	13.51%	16.27%	19.33%	22.76%	26.63%	30.93%	35.61%	40.60%	45.18%	48.49%	51.86%	55.66%
18	2.38%	3.22%	3.98%	4.96%	6.15%	7.57%	9.20%	11.04%	13.08%	15.31%	17.72%	22.08%	24.08%	26.25%	28.62%	31.11%	33.82%	36.70%	39.81%	43.51%
19	2.93%	3.95%	4.89%	6.09%	7.54%	9.26%	11.23%	13.44%	15.88%	18.54%	21.40%	24.32%	26.50%	28.82%	31.32%	34.03%	36.86%	39.92%	43.12%	46.55%
20	1.80%	2.58%	3.39%	4.23%	4.94%	5.69%	6.90%	8.55%	9.65%	12.03%	14.23%	16.71%	19.43%	22.40%	24.73%	26.81%	31.03%	33.15%	35.32%	37.27%

Policy #	Year																			
	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
1	45.13%	48.03%	51.16%	54.53%	58.18%	62.15%	66.48%	71.25%	76.57%	82.61%	89.78%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
2	43.90%	46.12%	48.39%	50.73%	53.14%	55.63%	58.19%	60.81%	63.49%	66.21%	68.95%	71.71%	74.48%	77.26%	80.01%	82.73%	85.38%	87.93%	90.36%	92.82%
3	28.45%	31.04%	33.82%	36.86%	40.10%	43.63%	47.38%	51.33%	55.27%	59.19%	63.01%	66.86%	70.65%	74.16%	77.43%	80.29%	84.06%	87.33%	90.46%	93.54%
4	33.85%	36.73%	39.81%	43.08%	46.56%	50.20%	54.07%	58.07%	62.22%	66.44%	70.47%	74.30%	77.86%	81.26%	84.41%	87.15%	89.53%	91.47%	93.82%	95.64%
5	22.37%	24.46%	26.73%	29.20%	31.88%	34.77%	37.92%	41.29%	44.93%	48.78%	52.64%	56.51%	60.31%	64.16%	67.98%	71.55%	74.91%	77.88%	81.84%	85.33%
6	30.69%	32.50%	34.41%	36.43%	38.57%	40.83%	43.20%	45.70%	48.34%	51.14%	54.10%	57.23%	60.54%	64.04%	67.74%	71.65%	75.79%	80.16%	84.76%	89.66%
7	51.23%	55.31%	59.33%	63.30%	67.12%	70.92%	74.62%	77.99%	81.07%	83.74%	87.17%	90.08%	92.78%	95.33%	97.29%	98.82%	100.00%	100.00%	100.00%	100.00%
8	36.57%	38.56%	40.65%	42.84%	45.13%	47.52%	50.01%	52.61%	55.28%	58.06%	60.94%	63.91%	66.98%	70.14%	73.37%	76.67%	80.01%	83.37%	86.72%	89.99%
9	43.49%	45.84%	48.29%	50.85%	53.49%	56.24%	59.10%	62.07%	65.14%	68.32%	71.59%	74.95%	78.37%	81.84%	85.33%	88.80%	92.18%	95.37%	98.18%	100.00%
10	38.28%	40.36%	42.54%	44.82%	47.20%	49.69%	52.28%	54.95%	57.72%	60.59%	63.57%	66.64%	69.80%	73.04%	76.35%	79.71%	83.09%	86.46%	89.78%	92.97%
11	36.74%	38.82%	40.97%	43.24%	45.61%	48.11%	50.69%	53.38%	56.21%	59.15%	62.22%	65.41%	68.72%	72.15%	75.69%	79.32%	83.02%	86.76%	90.50%	94.14%
12	43.26%	45.61%	48.11%	50.69%	53.38%	56.21%	59.15%	62.22%	65.41%	68.72%	72.15%	75.69%	79.32%	83.02%	86.76%	90.50%	94.14%	97.52%	100.00%	100.00%
13	58.57%	62.41%	66.27%	70.19%	74.05%	77.89%	81.55%	84.97%	87.97%	90.55%	92.70%	94.54%	96.03%	97.16%	98.01%	98.61%	99.20%	99.79%	99.93%	99.93%
14	47.22%	49.63%	52.13%	54.72%	57.40%	60.13%	62.95%	65.84%	68.79%	71.81%	74.87%	77.95%	81.04%	84.11%	87.12%	90.04%	92.79%	95.32%	97.50%	99.19%
15	56.15%	58.84%	61.59%	64.40%	67.29%	70.23%	73.22%	76.23%	79.26%	82.27%	85.25%	88.15%	90.92%	93.52%	95.86%	97.85%	99.33%	100.00%	100.00%	100.00%
16	48.46%	51.05%	53.76%	56.58%	59.53%	62.61%	65.80%	69.10%	72.52%	76.05%	79.66%	83.33%	87.04%	90.73%	94.31%	97.62%	100.00%	100.00%	100.00%	100.00%
17	60.60%	63.51%	66.40%	68.86%	71.28%	73.69%	76.07%	78.41%	80.70%	82.92%	85.05%	87.09%	88.99%	90.76%	92.39%	93.88%	95.20%	96.36%	97.34%	98.15%
18	43.08%	46.52%	50.20%	54.02%	57.98%	62.22%	66.44%	70.47%	74.30%	77.86%	81.26%	84.41%	87.15%	89.53%	91.47%	93.82%	95.64%	97.16%	98.43%	99.25%
19	50.12%	53.81%	57.70%	61.67%	65.70%	69.92%	74.00%	77.80%	81.30%	84.44%	87.33%	89.91%	92.05%	93.82%	95.21%	96.78%	97.91%	98.77%	99.41%	99.76%
20	39.27%	41.36%	43.54%	45.81%	48.19%	50.65%	53.22%	55.88%	58.59%	61.40%	64.29%	67.26%	70.30%	73.40%	76.54%	79.70%	82.86%	85.99%	89.05%	91.97%

Step #9

Cash Flow Based on Final Mortality Matrix — Used for Calculating Final LE, LE<sub>final</sub>

LE<sub>final</sub> = 9.54 years

Policy #	YEAR																			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
1	30,552	41,945	57,221	63,076	67,221	60,490	53,524	46,052	39,016	32,505	26,575	21,319	16,756	12,878	9,660	7,056	5,001	3,436	2,281	1,488
2	4,489	5,519	6,987	8,379	9,025	10,138	10,809	11,321	12,956	13,916	14,698	15,002	14,750	13,983	12,438	10,576	7,982	5,822	4,405	2,857
3	30,014	35,563	43,535	53,598	65,450	78,439	92,126	105,673	118,057	128,700	136,180	140,362	134,663	127,219	118,052	107,883	96,583	84,613	72,294	60,196
4	17,393	19,984	24,222	29,909	36,785	44,446	52,407	60,129	66,976	72,261	75,401	76,101	71,329	65,269	58,139	50,666	43,048	35,642	28,610	22,217
5	2,852	3,301	4,037	5,040	6,288	7,737	9,332	11,014	12,701	14,288	15,673	16,779	16,824	16,955	16,064	15,346	14,430	13,364	12,142	10,813
6	92,481	134,247	181,415	231,891	285,610	322,885	354,799	418,680	421,379	459,487	486,333	500,057	494,341	471,949	457,764	387,542	321,155	257,643	202,639	155,862
7	172,638	274,618	304,030	331,517	357,605	379,833	394,823	400,110	393,499	374,874	344,563	305,125	253,323	204,070	158,800	119,139	85,596	56,597	38,071	23,058
8	47,423	66,933	85,870	103,997	116,917	128,396	147,892	171,702	178,691	203,245	214,228	218,794	215,681	204,404	179,281	150,142	131,002	99,827	73,722	52,334
9	62,613	96,748	133,136	169,727	204,054	233,268	231,101	237,532	236,509	236,597	225,346	212,200	197,979	153,709	115,987	84,125	59,396	40,739	27,081	17,391
10	8,632	12,331	16,114	20,067	22,310	25,419	29,922	31,625	36,350	38,493	39,375	38,886	36,936	32,478	27,274	23,877	18,263	13,559	9,663	6,688
11	9,892	14,301	19,213	24,366	27,638	33,193	35,941	41,658	41,054	43,699	44,937	44,657	42,423	38,663	35,552	28,297	21,934	16,375	11,925	8,446
12	10,697	17,157	23,831	30,324	36,170	38,581	40,122	40,499	37,336	40,727	39,092	37,286	29,702	23,045	17,223	12,557	8,914	6,148	4,110	2,654
13	39,020	44,994	53,271	62,890	72,835	81,684	88,354	91,611	90,565	85,279	75,873	63,829	48,620	35,598	24,933	16,702	10,608	6,388	3,570	1,868
14	11,498	17,061	23,007	29,015	34,679	37,257	41,934	40,338	40,324	40,197	38,324	34,651	29,980	26,176	18,999	13,327	8,935	5,800	3,635	2,192
15	33,194	53,351	72,345	88,461	100,141	100,167	96,744	84,867	87,387	77,983	67,770	48,450	33,436	22,025	14,030	8,619	5,091	2,882	1,559	802
16	89,444	143,037	193,668	237,586	270,990	274,619	253,883	276,256	268,238	255,799	203,204	157,191	117,099	85,081	60,174	41,338	27,515	17,700	10,971	6,530
17	24,072	34,617	42,606	48,119	51,671	53,965	55,565	60,067	58,012	60,425	60,084	57,081	51,592	43,958	34,960	25,661	16,962	9,981	5,498	2,841
18	47,652	62,780	75,196	90,003	106,134	122,549	137,673	149,885	157,992	160,805	157,624	147,881	128,905	109,556	90,654	72,886	56,564	42,366	30,418	20,889
19	58,640	76,745	91,139	107,926	125,580	142,615	156,973	166,696	170,526	167,480	157,406	140,620	115,973	92,720	71,714	53,512	38,240	26,144	16,968	10,419
20	51,913	73,129	93,572	112,942	126,455	138,212	158,299	182,504	188,362	212,119	220,863	222,302	215,380	200,006	171,379	139,858	118,478	87,301	62,169	42,439
<b>DeathBenefits</b>	<b>\$845,109</b>	<b>\$1,228,354</b>	<b>\$1,544,415</b>	<b>\$1,848,835</b>	<b>\$2,103,559</b>	<b>\$2,313,882</b>	<b>\$2,442,223</b>	<b>\$2,630,221</b>	<b>\$2,655,930</b>	<b>\$2,718,880</b>	<b>\$2,643,549</b>	<b>\$2,498,574</b>	<b>\$2,265,671</b>	<b>\$1,979,302</b>	<b>\$1,683,098</b>	<b>\$1,369,106</b>	<b>\$1,095,689</b>	<b>\$834,288</b>	<b>\$621,732</b>	<b>\$451,954</b>

Policy #	YEAR																			
	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
1	893	522	289	150	73	33	13	5	1	0	0	0	0	0	0	0	0	0	0	0
2	1,776	1,047	592	320	165	81	38	16	7	3	1	0	0	0	0	0	0	0	0	0
3	48,596	37,938	28,501	20,555	14,120	9,202	5,633	3,211	1,683	806	350	137	48	15	4	1	0	0	0	0
4	16,610	11,920	8,174	5,325	3,276	1,887	1,012	499	224	91	32	10	3	1	0	0	0	0	0	0
5	9,407	7,983	6,591	5,275	4,078	3,029	2,155	1,457	931	556	308	156	73	31	12	4	1	0	0	0
6	117,195	86,000	61,463	42,684	28,726	18,682	11,694	7,027	4,037	2,206	1,140	554	250	105	40	14	4	1	0	0
7	13,388	7,048	3,379	1,466	571	196	61	16	4	1	0	0	0	0	0	0	0	0	0	0
8	36,067	24,125	15,625	9,772	5,884	3,400	1,878	988	492	231	102	42	16	5	2	0	0	0	0	0
9	10,771	6,415	3,661	1,993	1,031	504	232	100	40	14	5	1	0	0	0	0	0	0	0	0
10	4,493	2,924	1,838	1,113	647	359	190	95	45	20	8	3	1	0	0	0	0	0	0	0
11	5,815	3,882	2,507	1,562	935	536	293	152	75	34	15	6	2	1	0	0	0	0	0	0
12	1,654	990	568	311	161	79	36	16	6	2	1	0	0	0	0	0	0	0	0	0
13	902	398	159	57	18	5	1	0	0	0	0	0	0	0	0	0	0	0	0	0
14	1,270	705	373	187	89	40	17	6	2	1	0	0	0	0	0	0	0	0	0	0
15	391	180	77	31	12	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0
16	3,721	2,020	1,041	507	231	99	39	14	5	1	0	0	0	0	0	0	0	0	0	0
17	1,371	566	216	75	24	7	2	0	0	0	0	0	0	0	0	0	0	0	0	0
18	13,608	8,364	4,826	2,587	1,276	576	232	83	26	7	2	0	0	0	0	0	0	0	0	0
19	5,996	3,212	1,591	719	294	107	34	9	2	0	0	0	0	0	0	0	0	0	0	0
20	28,048	17,940	11,076	6,561	3,750	2,043	1,059	520	241	104	42	16	5	2	0	0	0	0	0	0
<b>DeathBenefits</b>	<b>\$321,971</b>	<b>\$224,178</b>	<b>\$162,547</b>	<b>\$101,270</b>	<b>\$65,361</b>	<b>\$40,871</b>	<b>\$24,620</b>	<b>\$14,215</b>	<b>\$7,819</b>	<b>\$4,079</b>	<b>\$2,006</b>	<b>\$926</b>	<b>\$399</b>	<b>\$159</b>	<b>\$58</b>	<b>\$19</b>	<b>\$6</b>	<b>\$1</b>	<b>\$0</b>	<b>\$0</b>



Founded in 1899, A.M. Best Company is a full-service credit rating organization dedicated to serving the financial services industries, including the banking and insurance sectors. For more information, visit [www.ambest.com](http://www.ambest.com) or contact one of our offices.

**A.M. Best Company**

Ambest Road  
Oldwick, New Jersey 08858  
Phone: (908) 439-2200  
Fax: (908) 439-3296  
[www.ambest.com](http://www.ambest.com)

**A.M. Best Europe Ltd.**

12 Arthur Street, 6th Floor  
London, UK EC4R 9AB  
Phone: (44) 20 7626 6264  
Fax: (44) 20 7626 6265  
[www.ambest.co.uk](http://www.ambest.co.uk)

**A.M. Best Asia-Pacific Ltd.**

Unit 5707 Central Plaza  
18 Harbour Road  
Wanchai, Hong Kong  
Phone: (852) 2827-3400  
Fax: (852) 2824 -1833  
[www.ambest.com.hk](http://www.ambest.com.hk)