

PENNSYLVANIA FUNERAL DIRECTORS ASSOCIATION

ACTUARIAL STUDY PRE-NEED TRUSTING LEGISLATION

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SCOPE OF REPORT

The House of Representatives of the Commonwealth of Pennsylvania is currently considering a bill entitled House Bill No. 2347. The most recent Printer's Number is 3946. The purpose of this report is to develop information that may be useful to the Pennsylvania legislature in its efforts to regulate the funding of pre-need contracts. What we have done is to develop a theoretical basis for regulation and then to suggest some practical approaches to initial implementation.

BACKGROUND

There are two different industries involved in pre-need sale of funeral services and merchandise. One is the mortician/funeral director/undertaker industry and the other is the cemetery industry. In both cases merchandise and services are sold at the time of need (i.e. at death). In addition since many persons wish to make sure their desires while alive are carried out at death and that the funds necessary are available then, there is also an active sale of pre-need merchandise and services by both types of provider.

Funeral Director

The funeral director on at-need basis is compensated for three distinct items:

1. The sale of merchandise such as a casket, a burial vault, a cremation container and urn.

2. Services and use of automotive equipment and funeral home premises including embalming, visitation, memorial service, burial service, etc.
  
3. Funds advanced for advertisements, death certificates, etc.

### Cemetery

Typically the cemetery plot itself is provided and the grave opening service and closing service is provided. The cemetery may also offer goods and services provided by funeral directors including caskets, burial vaults, corner markers, etc.

Since both industries cross into each others traditional merchandise and services, no further distinction is made between the two types of vendors in this report. Specifically, this report is not concerned with the sale of plots where ownership changes at sale nor with perpetual care.

### DISTINCTION BETWEEN PRE-NEED AND AT-NEED

An individual wishing to fund his or her final disposition can arrange for same in advance of death. In fact the funeral pre-payment is now not considered as an asset for public assistance or SSI programs, which allow minimum assets to be retained. The individual could choose a specific casket (which may range in price from a few hundred dollars to more than \$10,000) and a specific burial vault which also may have a price range of similar magnitude. The specificity may be so detailed as to indicate the name of the manufacturer, the size, the model number, the exterior and interior construction and lining material and color, the weight, etc. The pre-need contract could also cover services to be rendered in the future. In the case of cemetery purchases, it is typical for a specific cemetery plot to be purchased and funded over a fairly short period of time. The trust concept would apply to merchandise and services which could be funded in advance, but rendered at the time of need.

### Life Insurance

Pre-need agreements are often funded with life insurance and annuity policies. The insurance policy would be either a single premium whole life policy or a limited pay life policy with premiums payable for 5-15 years. These policies often have increasing face amounts (increasing at a rate such as 5% simple per year or at a rate related to a government price index such as the CPI or the GNP deflator). The reason for increasing face amounts is to offer protection to a provider of merchandise and services against inflationary increases in the price of those products and services. Annuities are sold to persons who do not provide satisfactory evidence of insurability at the time of purchase of life insurance. Typically a single premium annuity provides a lower initial death benefit for a given single premium than would a single premium life insurance policy. The annuity death benefit would increase to reflecting investment results or guarantees.

Since life insurance and annuities are regulated to a substantial extent by the insurance laws of the Commonwealth of Pennsylvania and other states, we are not suggesting that they be regulated once again by House Bill No. 2347. Nevertheless there is much to be learned in trust regulation from 200 years of insurance regulation in Pennsylvania.

### Non-Guaranteed Funding

If the provider of goods and services does not guarantee the purchase of specific goods and services for a fixed deposit, the matter simply becomes one of the investment of such deposit to produce future trust assets at the time of death which may be more than or less than the cost of goods and services provided at the time of death. To the extent that the fund remains under the ownership and control of the purchaser, existing regulation of banking and investment vehicles should be adequate for this type of investment as it is for any other

type of investment. To the extent that the funds are under the control and investment direction of the provider, then parts of this study relating to fiduciary responsibility concerning investments may be appropriate for this type of pre-need funding arrangement.

### Guaranteed Funding

The provider of goods and services guarantees that, regardless of investment performance or future price changes in merchandise or services, the products and services will be provided at no further expense to the estate or heirs.

### Individual Accounts

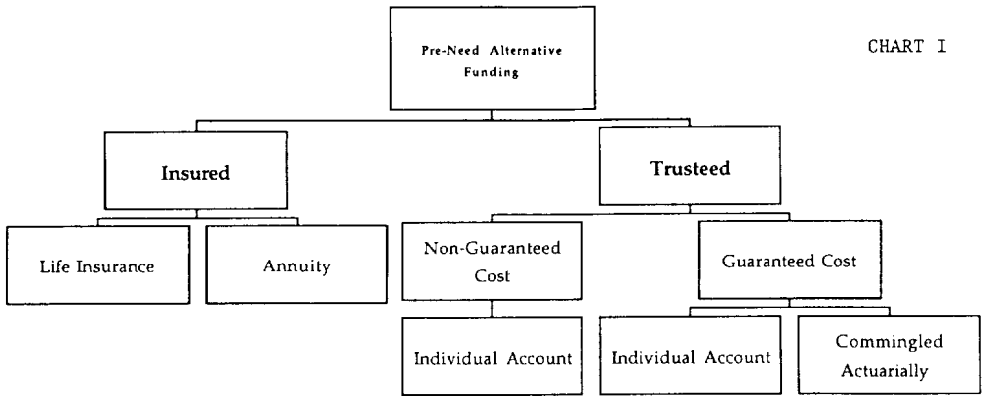
Presently, Pennsylvania law implies a separate trust account be established for each purchaser. Under the Funeral Director Law 100% of the purchase price is "trusted" and interest earned is accumulated. Under the Future Interment Law 70% of the purchase price is to be "trusted" (the remaining 30% may be retained by the seller). If the purchaser moves out of state and notifies the seller, the purchaser will obtain a refund of 70% of the original purchase price and the interest may be retained by the seller.

### Commingled Actuarial Funding

An alternative to establishing individual trust accounts (whether invested separately or in a master trust) is a fund that is commingled for investment purposes and does not allocate its assets to individual contracts. The fund, as a whole, is responsible for meeting its obligations on the death of each purchaser. Its liabilities are determined actuarially and its progress in adequately funding those aggregate liabilities is measured periodically. This report will be primarily interested in exploring this avenue.

A chart showing the alternative funding avenues is shown as Chart I.

CHART I



In its January 1994 performance audit, the Legislative Budget and Finance Committee of the Pennsylvania general assembly asked a number of pertinent questions:

- What specific goods and services are to be provided under the contract?
- What happens to the surplus or deficit in the funds at the time the goods or services are to be provided?
- Who is the recipient of interest earned on the money deposited pursuant to the contract?
- What happens if the beneficiary of the contract (the person whose remains are the subject of the contract) moves out of state or to a distant area within the state?
- What happens if the beneficiary's family or estate consciously rejects the vendor and selects a different vendor?

- What happens if the contract is not discovered until after the beneficiary has been otherwise disposed of?
- What happens if the vendor goes out of business without any successor?
- What happens if the vendor's assets, including the contract, are transferred to a successor?
- What happens if the funeral director's license has been suspended or revoked at the time the services are required?

A description of the concept of commingled actuarial funding follows. Answers to these questions are suggested.

### Actuarial Theory

Consider an 80 year old who wishes to provide \$1,000, payable at the time of his death. Based upon the latest decennial U.S. population mortality statistics, the 1979-81 Total Population Table, that 80 year old would have an average life expectancy of approximately 7 years. But there would be a 25% chance of that 80 year old living 11 years, a 10% chance of that person living 15 years or more and a very small chance of living to age 100 or even higher. Thus, the 80 year old, not knowing when he or she would die, might put \$1,000 aside in a mattress in order to provide \$1,000 at the time of death. If, however, that 80 year old was able to find a safe investment paying 5 1/2% interest, then that individual could put less than \$1,000 in that investment, because interest would be earned and credited to that individual's account. If, in fact, that individual could band together with 100 more individuals age 80, on the average they could put \$661 aside which would be sufficient to pay \$1,000 at the death of each one.

We have now introduced the concept of mortality and averaging and the need for large groups to achieve average results. Suppose, however, that individual needed to provide more than \$1,000 at the time of death, perhaps because the individual is buying goods and services whose price was expected to increase. If, in fact, the price was expected to increase at a 4% compound rate, then it would be necessary for each of those 100 individuals to put aside \$888 rather than \$661 in the previous example. Those who died in the first year would need \$1,040, those who died in the second year would need \$1,081.60, those who died in the third year would need \$1,124.86, etc.

The growth of \$888 at 5 1/2% interest and \$1,000 at 4% growth rate is shown in Chart II and graphically in Chart III. What is the advantage to the purchaser? Individual account funding would require an initial deposit of \$1,000. If the fund earned 5 1/2%, but the amount needed grew at 4%, then the excess 1 1/2% or \$15 could be repaid to the purchaser each year until death. Aggregate funding only requires \$888 at purchase, but no refund would be made each year. Clearly those who die early would collect more than their \$888 investment plus interest earned to date, but those who died later would collect less. This is the basic principle of life insurance. This principle also works outside of life insurance when a large enough group of individuals bands together in order to get statistically "average" results.

### A Risk Business

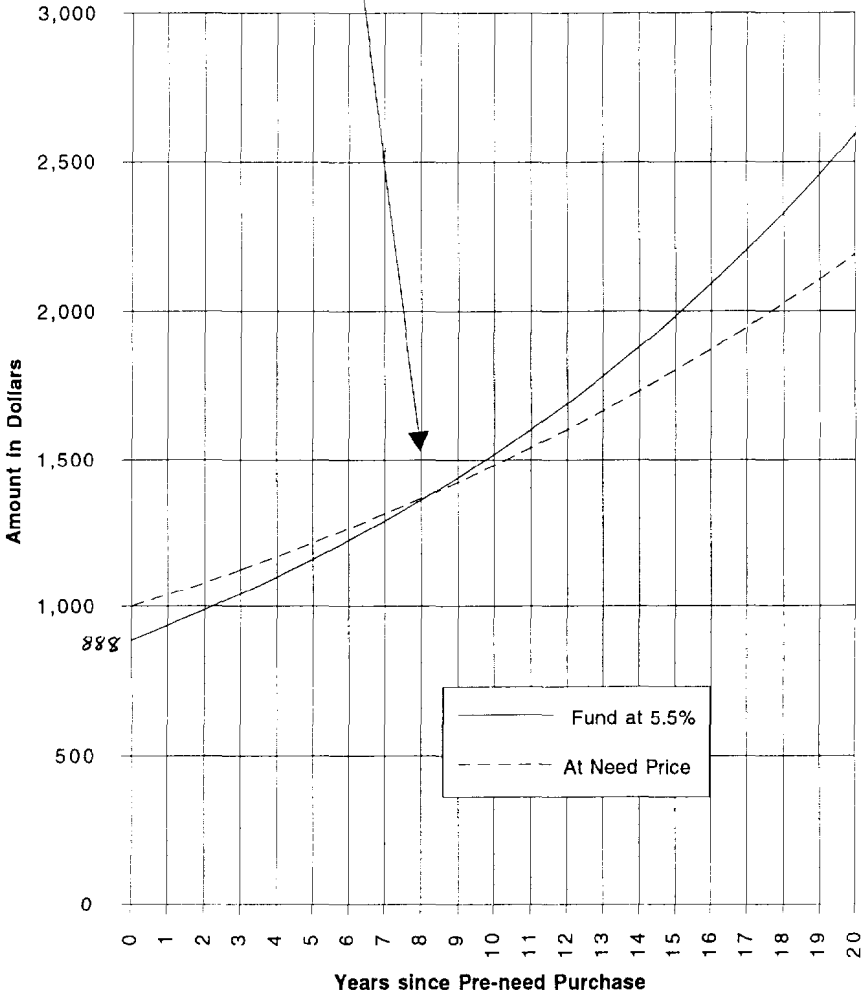
If a "guarantor" agrees to fund the promise then that guarantor must have sufficient capital to withstand fluctuations inherent in a risk type business. Such a guarantor has one further concern, and that is the effect of price changes that do not simply follow the 4% assumption. If, in fact, price changes are higher than the 4% assumption, the guarantor may find that despite the mortality projections working out as estimated, the cost of the merchandise or services has increased at a rate in excess of that assumed. Another risk

Comparison of Accumulation of \$888.31 at 5.5%  
 With \$1000 increasing at 4%

	Fund at 5.5%	At Need Price	
0	888	1,000	
1	937	1,040	
2	989	1,082	
3	1,043	1,125	
4	1,100	1,170	
5	1,161	1,217	
6	1,225	1,265	
7	1,292	1,316	
8	1,363	1,369	← Crossover
9	1,438	1,423	
10	1,517	1,480	
11	1,601	1,539	
12	1,689	1,601	
13	1,782	1,665	
14	1,880	1,732	
15	1,983	1,801	
16	2,092	1,873	
17	2,207	1,948	
18	2,329	2,026	
19	2,457	2,107	
20	2,592	2,191	



Crossover Individual vs Aggregate



element is the failure to earn the assumed rate of interest. Mismanagement of the maturity dates of investments may lead to liquidity problems if the investments are not marketable, or if they must be sold at distress prices.

### ECONOMICS OF FUNERAL GOODS AND SERVICES

The seller of the pre-need arrangement does so for several reasons.

1. To assure a future customer for at-need services.
2. To increase the value of his or her business, there being value to the number of pre-need arrangements sold in prior years.
3. In dealing with suppliers of merchandise, the supplier may assume part of the provider's risk of price changes.

The seller may establish alternative pricing philosophies. For example, the seller may add a small markup to wholesale prices of merchandise and charge a higher price for services. Alternatively the reverse may be true, a sizable markup on merchandise and a lower charge for services. Some statistical evidence may be useful in examining the order of magnitude of funeral prices and their change. Clearly this data is only provided to give the reader of this study some idea of the order of magnitude of the dollars involved (see FFDA study attached).

## CONCEPT OF TRUSTING

There are certain basic concepts involved in trusting of pre-need deposits. The operation of a trust fund is not dissimilar from that of a life insurance company and/or a pension fund. In both cases there are trust assets and there are liabilities. The assets consist of bonds, stocks, savings accounts and certificates of deposit that appear on the asset side of the trust balance sheet. The liability side of the trust balance sheet consists of a current measure of the amounts needed now, which together with investment income and anticipated price increases will be sufficient to provide the goods and services promised in the future.

### Segregated Versus Commingled Funds

In a life insurance company or in a defined benefit pension fund assets are not segregated. Thus, there is no specific current asset amount available for each beneficiary. Rather there is a benefit to be provided at death and once that benefit is provided, the obligation of the fund ceases. In such case, the assets are invested for the beneficiaries as a whole and are not specifically segregated. As was illustrated earlier, the actuarial process consists of measuring aggregate liabilities and comparing that with the aggregate assets. This is a distinction that should be contrasted with a defined contribution employee pension plan, such as a 401(k) plan, where the assets are invested in the aggregate, but an account is maintained for each participant and at the time of a participant's withdrawal from the fund, that specific account balance is paid to the participant. This requires that the assets of the fund be valued at market value so that participant's proportionate share of the market value is available and can be converted into liquid form (i.e. cash).

### Price Base for Trust Funding

The actuarial process starts with the concept of a future value (goods and services at the time of death, including future price increases) discounted to current date by assuming

investment of the funds at a rate of interest. We have to explore the concept of how to value goods and services--at wholesale, at retail or what? We can develop some clue from considering the possible inability of the current provider to perform in the future. Perhaps the current provider has closed his or her business and a substitute provider must be sought to provide the goods and services promised. The substitute provider clearly is not concerned with the price paid at some time in the past for the pre-need trusting. The substitute provider would probably want to receive his or her retail price for the funeral on an at-need basis, perhaps subject to a discount for the savings on sales expense. This then recognizes that there is sales expense involved for the sale of the pre-need contract which does not have to be paid a second time. There is also profit involved and if the original seller of the pre-need contract "kept" the profit at the time of pre-need sale, then the subsequent deliverer of goods and services may not wish to assume the pre-need arrangement at a price which is inadequate to render the service and provide the merchandise at reasonable profit. Our concept is that the provider of service, even if there is to be no future substitute, must be trusting and reserving sufficient funds to provide for adequate reimbursement at the time of need, with a discount for sales expense that need not be repeated.

Some might suggest that, at maturity of the contract, the original seller should be willing to take a significant discount from his normal at-need price and thus be allowed to "book" a significant profit at the time of pre-need sale. We would disagree with this concept. The seller who had inadequate assets in a trust fund would find that the value of his or her business has a significant liability attached to it. This might lead to the abandonment of the business, or the unwillingness of a future purchaser to agree to accept the pre-need contracts with their inadequate funding. Others might suggest that the trust fund should always be maintained at 100% of the current retail price of the merchandise and services. We believe this to be too conservative as a minimum requirement.

Sellers have expenses of sales and marketing, including a portion of the proprietor's salary or income, which should be recognized at the time of sale. If the trusting requirements are too onerous, the ability to incur the expense of pre-need sales and marketing is limited to those well established sellers with large capitalization or many current at-need burials.

Wholesale Price as Basis for Funding or Reserving

It has been suggested that 50% or 100% or 120% of the wholesale price be used as a standard. We disagree with this for several reasons.

1. Services have no "wholesale price," only merchandise. Typically, a contract includes both merchandise and services and the pre-need price includes both in a single deposit. FFDA statistics show that only 18% of the retail price of the average funeral (excluding vault) is the wholesale price of the casket.
  
2. Some vendors have a small markup on merchandise and a higher price on services, and others the reverse. This sets a highly variable standard for total trusting. For example, if two vendors provide the following identical merchandise and services as follows:

	<u>Retail Price</u>	
Merchandise	\$3,000	\$2,000
Services	2,000	3,000
Total	\$5,000	\$5,000

If the wholesale price of merchandise to each is \$1,000, and 100% of the wholesale price is to be trusted by each, i.e. \$1,000, what should the services be trusted at, given a \$2,000 retail price by one and a \$3,000 retail price by the other?

This leads us to the conclusion that some percentage of current retail price should be used for funding and reserving. Retail prices must be published for consumers by Federal law (FTC).

#### APPLICATION OF ACTUARIAL THEORY TO PRE-NEED INDUSTRY ECONOMICS

The actuarial theory as to the funds needed for a given at-need amount is substantially dependent upon three assumptions:

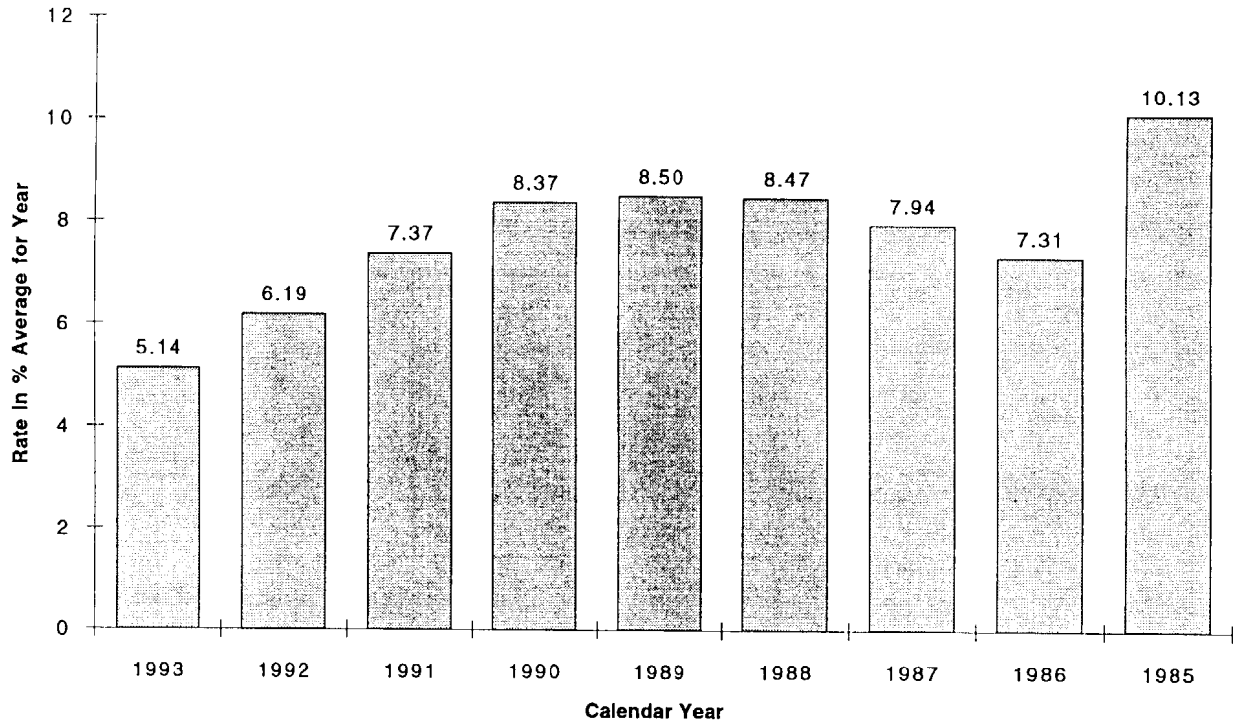
1. The rate of investment return to be earned on trust funds.
2. The rate of price inflation.
3. The attained age of the individual involved.

It is not dependent upon the price at which the pre-need contract was sold.

#### Rate Of Investment Return

The appropriate interest rate to use for this purpose will depend upon the nature of the investments on the asset side of the balance sheet. It is, however, necessary to choose a rate appropriate to safe investments and a rate appropriate to the average length of time such funds are to be invested. For this purpose we have selected the five year constant maturity treasury rates available on U.S. treasury investments. The history of the past nine years in these investments shows a pattern of decline (Chart IV). The other area of recognition is that a sizable portion of pre-need funds are deposited in certificates of deposit with banks and savings associations and these investments generally pay rates of interest less than treasury investments.

### 5 Year Treasury Constant Maturity



Income tax considerations enter into the selection of a rate of return. The Internal Revenue Service has promulgated Revenue Ruling 87-127 which states that purchasers are responsible for payment of income tax on trust fund earnings, arriving at this conclusion by two different routes (1) the grantor is the purchaser and hasn't transferred title to the seller and/or (2) the purchaser may cancel the arrangement and get a refund. IRS has only considered individual trusts in this revenue ruling. The practical effect is that some vendors are reporting to IRS on Form 1099 if investment income is greater than \$600 per year. Others report all income on Form 1041. On an actuarially commingled trust, IRS might choose to tax the trust itself, or it might allocate investment income in proportion to the actuarial reserves and tax the purchasers. A reading of Revenue Ruling 87-127, especially Situation 4, may lead one to the latter result. We are actuaries and do not provide tax advice.

Investment expenses are often involved in payment for trusteeship or custody of assets.

We have selected a rate of 5 1/2% net of expense and tax for our computations.

#### Rate Of Price Inflation

It is difficult to get accurate statistics on price inflation. We have received some information from a funeral home that has retained wholesale price lists of caskets and burial vaults extending back to the middle 1980's. We have selected particular models from the price list which have not changed in description over the period of time in which they are shown. For example, a particular Eastern Pennsylvania manufacturer selling a poplar casket had a wholesale price of \$458 in 1985 and this price gradually increased to \$685 in 1994. A different burial vault manufacturer charged \$995 in 1983 for a 3,000 pound bronze burial vault and the price of this vault in 1993 is \$1,555. We have also examined national retail price statistics of the Funeral Directors Association for the five years 1989-93. This data is shown in Charts VII A to C.



We fitted exponential growth curves to each of the 10 different products and did the same to the Consumer Price Index. The Consumer Price Index showed a growth rate slightly under 4% per year for the period and the casket prices grew at a slightly lower rate and the burial vaults grew at a slightly higher rate. The retail prices grew at a higher rate than the CPI. The Social Security Administration has assumed 4% for its changes in the Consumer Price Index for purposes of determining the actuarial balance of the Social Security system. Taking these various factors into account we have assumed a price increase rate of 4% per year.

### Use Of Age

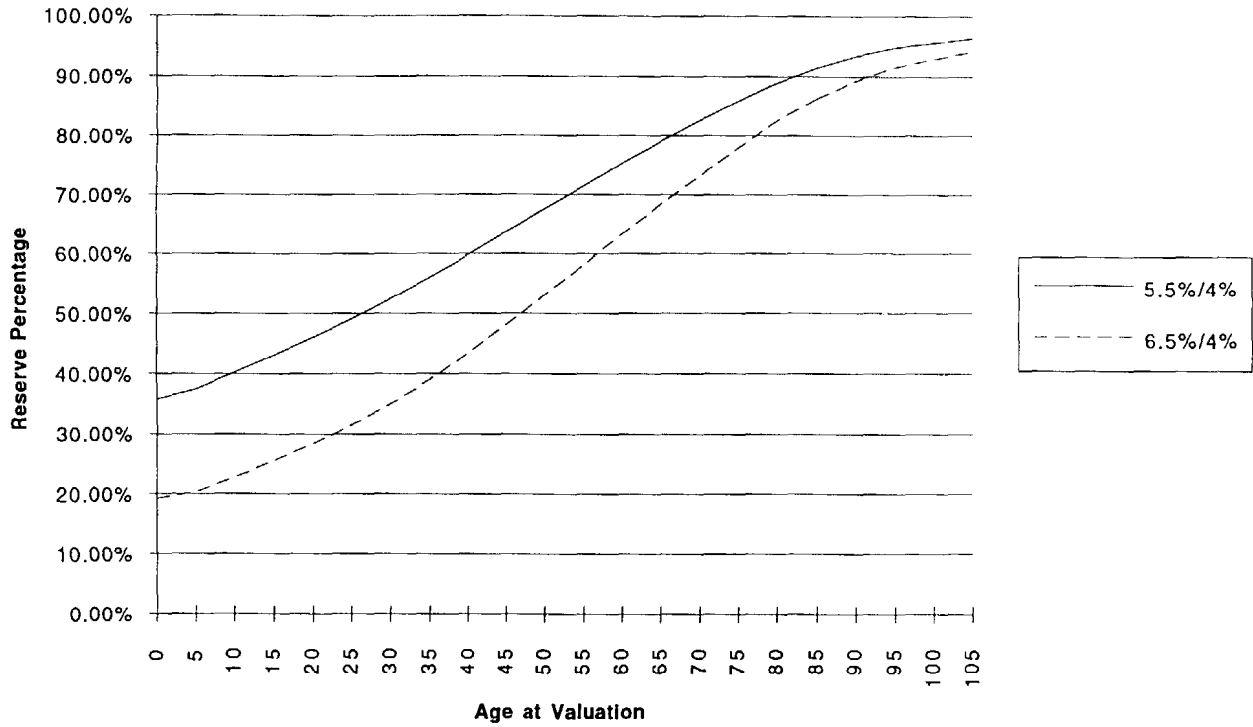
The two assumptions concerning interest and price increases are independent of age. Mortality, however, is not independent of age and there is a significant difference in the factor depending upon the attained age of the individual whose pre-need agreement is being valued. There is shown both a table (Chart V) and a graph (Chart VI). At the 5.5% interest, 4% price increase assumption the reserve is 67% at age 50 and 91% at age 85. This difference is even more magnified if we increase the interest assumption by 1% to 6.5%. Then the factor becomes 53% at age 50 and 86% at age 85. While most legislation is written independent of age, we would strongly recommend that age be considered. It is logical to have reserve requirements increase with age as the probability of death increases. There appears to be considerable controversy as to the average ages at which these pre-need contracts are written. One study on the subject of merchandise assumes an average age at purchase of 53. AARP suggests "over 70." Some persons in the industry have anecdotally suggested "late 70's." "Averages" are not appropriate for valuation of the liabilities of a vendor whose pre-need book of business is significantly older or younger than the average. If, in fact, some method of reporting which shows age is provided, then future amendments to the legislation will be based upon actual age and price data rather than "impressions."

Age at Valuation      Reserve as Percent Current Amount

0	35.83%	19.25%
5	37.47%	20.34%
10	40.16%	22.78%
15	43.05%	25.53%
20	45.98%	28.40%
25	49.05%	31.51%
30	52.36%	35.02%
35	55.92%	38.98%
40	59.67%	43.34%
45	63.56%	48.01%
50	67.49%	52.92%
55	71.42%	57.98%
60	75.28%	63.13%
65	79.00%	68.22%
70	82.54%	73.21%
75	85.82%	77.95%
80	88.83%	82.42%
85	91.35%	86.25%
90	93.31%	89.27%
95	94.74%	91.51%
100	95.60%	92.87%
105	96.41%	94.14%

5.5% Interest	6.5% Interest
4% Price Increase	4% Price Increase
79-81 US Tables	79-81 US Tables

### Reserve Percentages at Different Assumptions



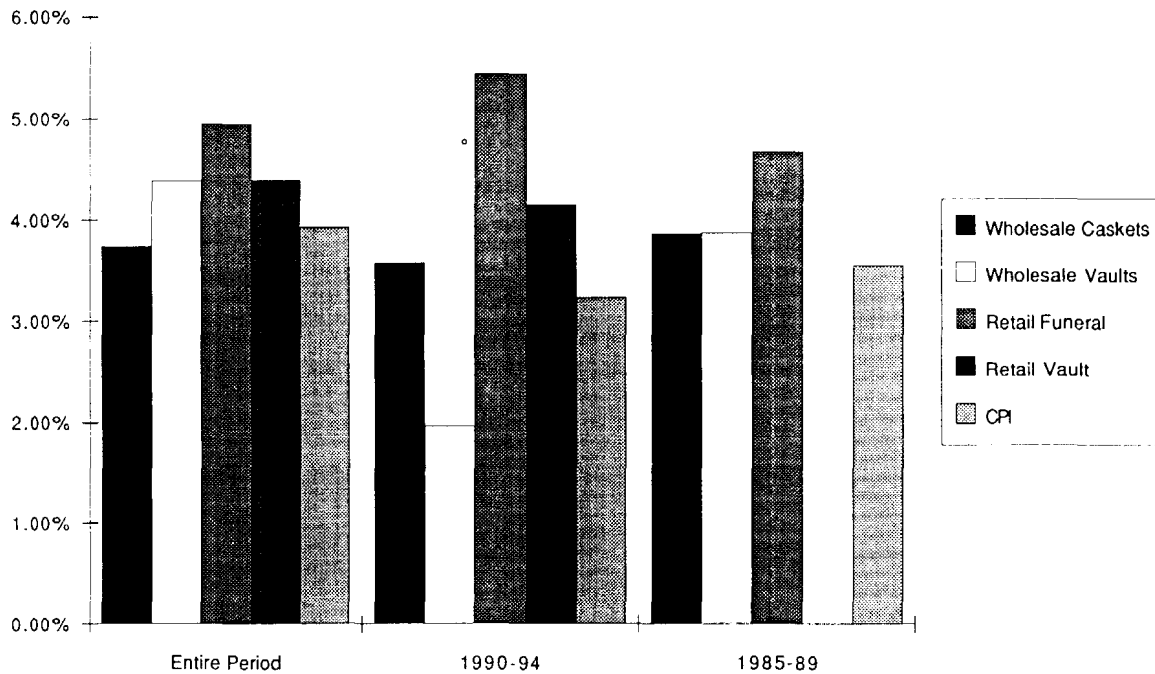
Listing of Economic Statistics

Re Prices of Funeral Goods in Pennsylvania

Source	Nature	Manufacturer	Specific	1994	1993	1992	1991	1990	1989	1988	1987	1986	1985	1984	1983	1982	1981	1980
				Caskets - Wholesale														
Eastern Pa Fun Home Wholesale	Caskets	Eastern Pa Manufacturer	Plymouth Poplar	685	650	632	602	573	546	528	494	475	458					
Eastern Pa Fun Home Wholesale	Caskets	Eastern Pa Manufacturer	Executive Mahogany	1605	1539	1495	1478	1408	1333	1268	1207	1175	1155					
Eastern Pa Fun Home Wholesale	Caskets	National 1	Brush Copper/Egg Velvet							1330	1308	1272	1217					
Eastern Pa Fun Home Wholesale	Caskets	National 1	Brush Cop Brz/Rosln CRPE							590	586	575	550					
Eastern Pa Fun Home Wholesale	Caskets	National 2	48oz Solid Bronze Monoseal									2030	1955	1893				
Eastern Pa Fun Home Wholesale	Caskets	National 2	19 Gauge Monoseal									436	419	406				
Eastern Pa Fun Home Wholesale	Caskets	National 3	Oak 23"78			638	618		555	526								
				Burial Vaults - Wholesale														
Eastern Pa Fun Home Burial	Vaults	National 4	3000 lb Bronze			1555		1540		1155	1100			995	995			
Eastern Pa Fun Home Burial	Vaults	Eastern Pa 2	Flat		255		237			217	211		200	185				180
Eastern Pa Fun Home Burial	Vaults	Eastern Pa 3	Porcelite	555		535					400							
Fed Funeral Director Sale Price	Funeral	National-Members	Funeral - Retail	3819	3663	3507	3247	3115										2367
Fed Funeral Director Sale Price	Vault	National-Members	Vault- Retail	710	687	661	628	599										
Dept of Labor	CPI-Urban Wage Earners and Clerical Workers			142.1	138.2	134.3	129	122.6	117	112.5	108.6	106.9						

			<b>Fitted Exponential Growth Rate</b>		
			<b>Entire Period</b>	<b>1990-94</b>	<b>1985-89</b>
<b>Caskets- Wholesale</b>					
Wholesale Caskets	Eastern Pa Manufacturer	Plymouth Poplar	4.65%	4.43%	4.68%
Wholesale Caskets	Eastern Pa Manufacturer	Executive Mahogany	3.98%	3.07%	3.69%
Wholesale Caskets	National 1	Brush Copper/Egg Velvet	2.99%		2.99%
Wholesale Caskets	National 1	Brsh Cop Brz/Rosin CRPE	2.32%		2.32%
Wholesale Caskets	National 2	48oz Solid Bronze Monoseal	3.56%		3.84%
Wholesale Caskets	National 2	19 Gauge Monoseal	3.63%		4.06%
Wholesale Caskets	National 3	Oak 23*78	5.06%	3.24%	5.51%
			<b>Unweighted Averag</b>	<b>3.74%</b>	<b>3.58%</b>
<b>Burial Vaults - Wholesale</b>					
Burial Vaults	National 4	3000 lb Bronze	5.27%	0.32%	5.00%
Burial Vaults	Eastern Pa 2	Flat	2.86%	3.73%	2.75%
Burial Vaults	Eastern Pa 3	Porceltite	5.02%	1.85%	
			<b>Unweighted Averag</b>	<b>4.39%</b>	<b>1.97%</b>
Sale Price-Funeral	National-Members	Funeral - Retail	4.95%	5.45%	4.68%
Sale Price Vault	National-Members	Vault- Retail	4.39%	4.15%	
CPI-Urban Wage Earners and Clerical Workers		<b>CPI</b>	<b>3.93%</b>	<b>3.24%</b>	<b>3.55%</b>

### Fitted Growth Rate:



## APPLICATION OF FACTORS TO CURRENT VALUE

The current retail price of the goods and services to be provided in the future, less a discount for sales expense to be recognized, should be the value to which the factors are to be applied. For example, if the current retail price of goods and services under a pre-need contract is \$5,000 and if the sales compensation is recognized as being worth 20%, then the remainder of \$4,000 should be applied to the actuarial factor at the current attained age of the contract holder. For example, if the attained age is 85, then the factor of 91.35% should be applied to the \$4,000 adjusted price to obtain an actuarial value of \$3,654 to represent the liability with respect to that contract.

## TRUST FUND STRUCTURE

There are certain basic principles in the operation of trust funds which we have learned from both the life insurance industry and from pension funds. On the asset side, funds should be invested prudently and should not be commingled with operating funds of the provider organization nor should investments be made in equity or debt of related entities. In essence the federal pension law, ERISA, provides good guidelines for prevention of dealing with fiduciaries and parties in interest from the standpoint of investments. In general the nature of the contract requires that investments should be substantially made in fixed income investments with a small proportion in high quality equities permitted. Investments should be subject to the "prudent person" rule. They should be invested with regard to safety, marketability, liquidity and with due regard to the emerging liability under contracts that have been put onto the books. Specifically, the trust fund should be able to stand on its own and should not need the sale of future contracts in order to build up sufficient funds to fulfill obligations under existing contracts.

## BRINGING ASSETS AND LIABILITIES INTO BALANCE

No pension fund or life insurance company always has its assets and liabilities in full balance. The assets, valued at market, may be greater or less than the actuarial liabilities valued currently (based upon current retail prices, less sales discount) and based upon current attained age actuarial factors. If the assets exceed liabilities, it is suggested that the difference be divided by five and the deposits to the fund in the next year can be reduced by this amount. If the liabilities exceed the assets, then in symmetrical fashion, additional deposits to the fund would be necessary for  $\frac{1}{5}$  of this amount each year. The frequency of the measurement of assets and liabilities would determine the redetermination of the additional contribution addition or reduction. For example, if the requirement is for triennial valuations, then three years after the first valuation a new redetermination of surplus or deficit would be made and for the next year  $\frac{1}{5}$  of the difference would be amortized.

As each new contract is added to the fund, the amount deposited would be determined actuarially in the same fashion as a liability is determined. It would not be a fixed percentage of the "price" paid by the pre-need purchaser. Nothing, of course, would prohibit the service provider from depositing a larger amount into the fund than the minimum initial contribution determined under the actuarial principle.

For installment payments under contracts which are generally not guaranteed until full payment is made, the amount transferred to the guaranteed fund would be based on retail prices, less sales allowance, and the age at the time of transfer.

## RISK FACTORS

There are a number of risk factors of which the "guarantor" of the pre-need fund should be aware. Firstly, the rate of investment return may fall below the assumption, secondly, the rate of price increase may exceed the assumption, thirdly, fluctuations in



mortality may result in an excess of deaths over those predicted, and lastly, asset defaults may occur. Considering these various possibilities, it seems reasonable to prohibit the withdrawal of funds from the trust in cash, other than to purchase merchandise and services at the time of a death. If funds are withdrawn during good times, it may not be possible to assure that funds are added during adverse experience. In the event of adverse experience, the provider can absorb some of the adverse experience by "charging" a lower price for merchandise and services rendered at need. In addition, the provider can "reinsure" some of the merchandise price change by entering into an agreement with a manufacturer of merchandise where the manufacturer would guarantee some limitation on price increases.

### Guarantee Fund

*Despite the best efforts of all concerned, there will be trust funds that are abandoned with inadequate funding.*

Even though laws are written to be obeyed, there are a certain percentage of sharp operators or out-and-out criminals who get into any field whether it be insurance, banking, or pre-need funeral and cemetery services. Thus, consideration might be given to establishing a backup structure which would be the entity of last resort. Consider three other industries:

1. The Federal Deposit Insurance Corporation insures against bankruptcies by banks, and guarantees bank accounts of up to \$100,000 against loss. FDIC has had substantial activity with the savings and loan debacle of the 1980s.
2. The Pennsylvania Insurance Department has a workers' compensation guarantee fund which has stepped into the breach when two casualty insurance companies have gotten into difficulty and have been unable to make payments to injured

workers. Every casualty insurance company contributes a percentage of its paid workers' compensation losses to this fund each year and the fund is kept at a size to insure substantial comfort to the Insurance Department and to the Department of Labor and Industry. In 1993, the passage of the workers' compensation reform bill also provided for separate guaranty funds for both individual self-insured employers and for group self-insured employers.

3. Defined benefit pension plans are insured by the Pension Benefit Guaranty Corporation. PBGC premium rates started initially at \$0.50 per year per covered plan member. This has increased substantially over the years as a small number of large plan terminations have occurred with inadequate funding. Rates now vary from \$19 to \$72 per member per year, depending upon the riskiness of an individual pension fund's finances.

Consequently, consideration might be given to establishing a guarantee fund for this funeral and cemetery pre-need area with contributions of perhaps \$10 in the first year of a contract and \$2 in subsequent years for each pre-need contract in force. After a period of years the contribution rate might be increased or decreased to take into account emerging experience.

We might also mention the way the guarantee fund works for life insurance companies. Essentially, it is not funded until an insurance company gets into trouble. At that point there is an assessment against the remaining insurance companies, as a percentage of premium, to help fund the problem company.

The conservative approach is to pre-fund the guarantee fund rather than to post-fund it, as has been discovered in the life insurance area where many insolvencies have severely strained the ability of existing companies to fund the guarantee fund.

### Performance Bonds and Letters of Credit

The suggestion has been made that performance bonds and/or letters of credit might be substituted for or required in addition to trust funds. Our experience with workers' compensation self-insurance bonds leads us to believe that it is not a fruitful avenue for exploration. Those few insurance companies selling workers' compensation bonds require a letter of credit as backup. Banks are reluctant to issue long-term letters of credit. Providers of funeral merchandise and services are generally small businesses and would have great difficulty obtaining either of these forms of guarantee.

### REPORTING AND DISCLOSURE

1. Require all sellers of pre-need merchandise and services to apply for a "certificate of registration". Those not having the "certificate" would be breaking the law and would be prosecuted.
2. The "certificate of registration" would require a triennial financial evaluation.
3. The "financial evaluation" would be conducted by a Certified Public Accountant, a Licensed Public Accountant, or an Enrolled Actuary (ERISA). The professional would prepare an actuarial balance sheet. The assets would be valued at market value. The liabilities would be valued by applying the state authorized factors to the current retail prices of goods and services (less sales discount), at the attained age of the individual. A sample reporting form is attached, modeled after the Public Employee Retirement Commission form (Chart XA to XE). It only includes financial data on Post-1994 guaranteed contracts. It could be expanded to include other trust funds.

4. The professional would compute the surplus or deficit and the amount necessary to amortize that over a five year period.
5. The professional would also certify that the minimum addition to the trust fund for the preceding three year period was made in accordance with the minimum requirements.
6. The professional would also certify that the amounts withdrawn from the trust fund in the three year period did not exceed the then current price list, less sales allowance.

The intention here is to develop a simple, professional certification and this information could then be tabulated for each provider and the statewide overall results could be summarized and provide much useful overall information. This information would be helpful in determining the age distribution of holders of pre-need contracts, the amounts of assets backing up these contracts, etc. The certification statement could also be used as a basis for collection of the guarantee fund payments (this is not shown in the sample).

We have arbitrarily suggested that this be done triennially. Something similar to this is done for municipal pension funds of which there are nearly 2,600 in Pennsylvania. The Public Employee Retirement Commission requires a report every two years for healthy plans and every year for underfunded plans. The information provided shows an age/service/salary matrix of the employees. In effect it transfers most of the work to the professional, leaving the job of enforcement and statistics compilation to the government agency. The penalty for non-filing is omission of the community from distribution of foreign insurance tax funds that normally go to municipal government pension funds.

## COMPARISON WITH OTHER APPROACHES

We have examined other approaches and one major feature of our approach is to reflect the age of the individual involved, both at the time of purchase of the pre-need contract and evaluation of liabilities in subsequent years. Secondly, our approach looks at all customers as a whole rather than attempting to identify a specific segment of the trust fund assets with a specific contract. Thirdly, our approach looks at the liability from the standpoint of what is to be provided in the future and what it currently costs, rather than from the standpoint of the price that the pre-need contract sold at in the past and how much it has earned in the fund.

Clearly, 100% *trusting*, 90%/10% *trusting*, 85%/15% *trusting*, 100% of wholesale *trusting*, 120% of wholesale *trusting*, or 70%/30% *trusting* are approaches designed to ignore, or take into account, sales expense. The legislature should consider the degree of trust safety involved and should develop some arbitrary percentage as representing sales expense. These methods generally ignore what has happened to actual price changes subsequent to sale.

Another approach is to simply sell goods and services at today's price and to deposit 100% of that amount in a banking institution. Once a year, or less frequently, the amount in the account would be compared with the current price of the goods and services. If the amount in the account exceeded the current price, then the provider would withdraw the difference.

We have trouble with this approach for several reasons:

1. The amount deposited initially may be larger than necessary since it should be possible for the provider to initially deduct a sales commission and the pre-need factor which allows for the time value of money in excess of price inflation.

2. It is possible that price increases might exceed the rates of interest earned on bank deposits (this is now the case) in which case the provider may not add the funds necessary to bring the assets up to the current price.
3. While this method, in general, is conservative, it does not square with the economic realities that sales expenses are involved and the requirement that the full amount be "trusted" assumes that the sales costs must be paid from other sources, such as current at-need funerals.

A companion of initial trusting levels is shown in Charts VIII A-C. The actuarial commingled approach assumes a 20% sales/marketing allowance.

The questions raised earlier in this report by the Legislative Budget and Finance Committee might be answered as follows in relation to the suggested "commingled actuarial" approach.

- What specific goods and services are to be provided under the contract?

**These would be detailed in description and current retail price. If the merchandise or service became unavailable in future, the vendor would be required to notify the purchaser of the substituted goods and services and their current retail price.**

- What happens to the surplus or deficit in the funds at the time the goods or services are to be provided?

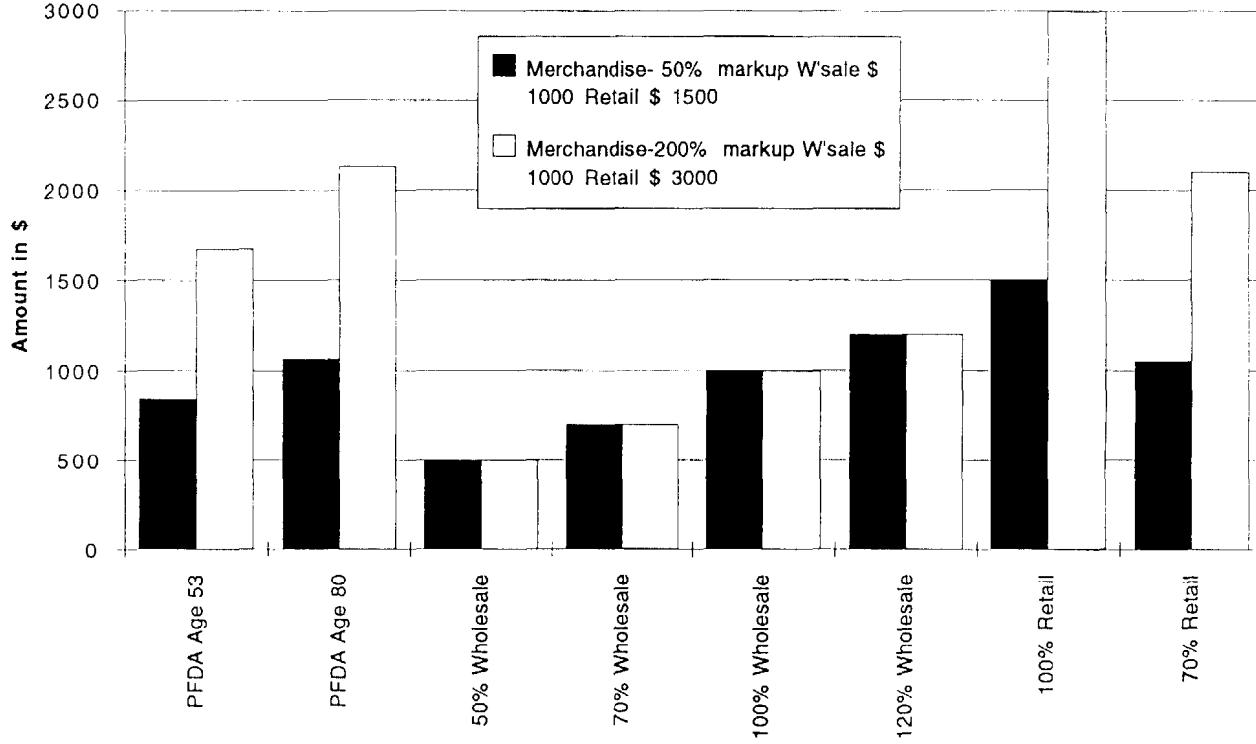
**No individual surplus or deficit exists. The vendor provides the contracted goods and services, without additional charge or refund.**

### Initial Trusting Levels

<u>Merchandise/ Service</u>	<u>Price</u>									
	<u>Wholesale</u>	<u>Retail</u>	<u>PFDA* Age 53</u>	<u>PFDA* Age 80</u>	<u>50% Wholesale</u>	<u>70% Wholesale</u>	<u>100% Wholesale</u>	<u>120% Wholesale</u>	<u>100% Retail</u>	<u>70% Retail</u>
Merchandise-lower markup	\$1,000	\$1,500	\$838	\$1,066	\$500	\$700	\$1,000	\$1,200	\$1,500	\$1,050
Merchandise-higher markup	\$1,000	\$3,000	\$1,676	\$2,132	\$500	\$700	\$1,000	\$1,200	\$3,000	\$2,100
Services	Not Available	\$4,000	\$2,235	\$2,843	Not Available	Not Available	Not Available	Not Available	\$4,000	\$2,800
Merchandise and Service	Not Available	\$5,000	\$2,794	\$3,553	Not Available	Not Available	Not Available	Not Available	\$5,000	\$3,500

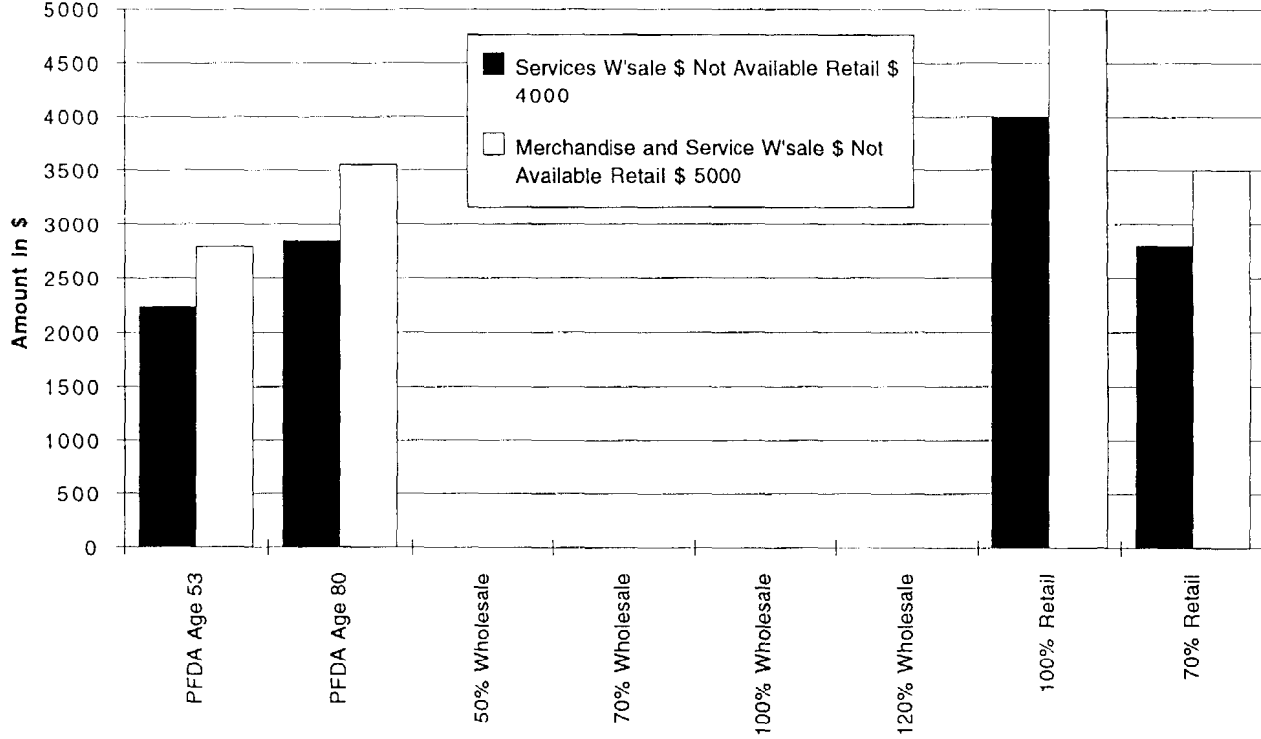
\* 20% Sales Allowance

Initial Trusting Levels





### Initial Trusting Levels



- Who is the recipient of interest earned on the money deposited pursuant to the contract?

**It is part of the vendor's aggregate fund.**

- What happens if the beneficiary of the contract (the person whose remains are the subject of the contract) moves out of state or to a distant area within the state?  
**100% of the actuarial reserve, at current age applied to current retail price, less sales allowance percentage, may be paid to a new provider or may be returned to the purchaser, at the option of the purchaser. The contract would be canceled, if agreed to by the purchaser.**

- What happens if the beneficiary's family or estate consciously rejects the vendor and selects a different vendor?

**Is the decedent's intent being thwarted? Suppose the decedent wanted and paid for a \$10,000 funeral, should the family select a \$2,000 funeral from a different vendor and pocket the \$8,000 difference? This is a legal and not an actuarial matter. We suggest that the original vendor remit 90% of the current price, less sales allowance and retain the remaining 10%.**

- What happens if the contract is not discovered until after the beneficiary has been otherwise disposed of?

**100% of the current retail price, less sales allowance, shall be applied to the cost of the actual funeral and if any balance remains, it shall be paid to the estate or survivors.**

- What happens if the vendor goes out of business without any successor?

**The Guarantee Fund shall entertain bids from vendors in the immediate area for the former vendor's "book" of pre-need contracts. The high bid of responsible**

**bidders providing similar quality merchandise and services shall be accepted. Purchasers shall be notified of the assignment of their contracts. Those not agreeing shall be paid 100% of the actuarial reserve and the contracts shall be canceled. Those agreeing shall be transferred. The Guarantee Fund shall transfer sufficient assets from its own funds and the trust fund of the former vendor to equal the actuarial reserves for contracts transferred.**

- What happens if the vendor's assets, including the contract, are transferred to a successor?

**Normally no change is required if the successor agrees to the transfer of assets and liabilities of the trust. Perhaps purchasers may be given a 90 day period to opt out of the contract for a payment equal to perhaps 90% of the actuarial reserve. If the vendor is a corporation and its stock is sold, then no change has occurred.**

- What happens if the funeral director's license has been suspended or revoked at the time the services are required?

**If no other possibilities of obtaining the same services and merchandise exists, the trust fund would be required to pay the current retail value of the goods and services, less sales allowance, to the substitute provider.**

### Implementation

This "commingled actuarial" method would be implemented prospectively for new contracts entered into on or after some specified future date. Within 5 or 10 years it is likely that the bulk of the then guaranteed cost pre-need business will be subject to the these

standards as the result of deaths and withdrawals of individual account programs previously contracted. The assets backing up these post-1994 guaranteed contracts would be separately accounted for and not commingled with pre-1995 contracts or non-guaranteed contracts.

#### NON-GUARANTEED CONTRACTS AND INSTALLMENT CONTRACTS

These contracts would be required to conform in consistent fashion to the legislative mandates suggested here, such as

- (1) Trust funds investment standards.
- (2) Reporting, disclosure, guaranteed fund contributions.
- (3) Initial trusting based on retail price, less same sales allowance percentage.
- (4) Entire net investment earning would be credited to account.
- (5) At maturity, estate would receive excess assets or pay difference in cost.
- (6) 10% forfeiture if vendor rejected at death or on transfer.
- (7) If installment contract is fully paid and is then guaranteed, vendor must add to guaranteed fund the attained age actuarial reserve based on current prices, less sales allowance percentage.

#### SUMMARY AND CONCLUSIONS

We believe that we have developed a system which is actuarially sound, is self-adjusting, and will require a minimum of computations on the part of regulators, leaving the professionals to be responsible for financial computations necessary to maintain continued registration. The reporting, if enforced and then tabulated, should enable state government to get some idea as to the overall financial magnitude of pre-need contracts. Finally, the approach recognizes the possibility of failure in funding and does provide for a guarantee fund as a backup.

# Funeral Costs Drop Over 20-Year Period

By George W. Lemke, Executive Director  
Casket Manufacturers Association

FUNERAL COSTS (services, facilities, transportation, and casket) have declined over the past 20 years, according to a constant dollar analysis of funeral prices.

In constant dollars, funeral prices in 1968 were \$2,689.86 as contrasted to 1988 charges of \$2,529.32 — an actual decline of 6.1 percent in terms of real purchasing power. Using the Consumer Price Index for all urban workers (CPI-U) and adjusting actual prices for inflation

demonstrated this result. Real funeral prices ranged from a low of \$2,294.46 in 1981 to a high of \$2,739.62 in 1972 (See *Tables I and II*).

It is generally understood that service costs (non-casket items) represent more than 80 percent of funeral costs. Thus, a comparison (See *Tables II and III*) using the Consumer Price Index - Services (CPI-S) also was made. According to the CPI-S, real funeral prices declined

from \$3,084.34 in 1968 to \$2,380.42 in 1988, almost identical to the 1983 sum, using the same analysis. It appears that funerals, in spite of their service cost base, more closely track the CPI-U than the CPI-S.

This analysis of funeral prices also calls into question the economic analysis conducted by the Federal Trade Commission in its Baseline Study (1982) and its 1987 follow-up study to assess the impact, if any, of the Funeral Rule on funeral prices.

*Table I*  
**FUNERAL PRICES AND INFLATION**

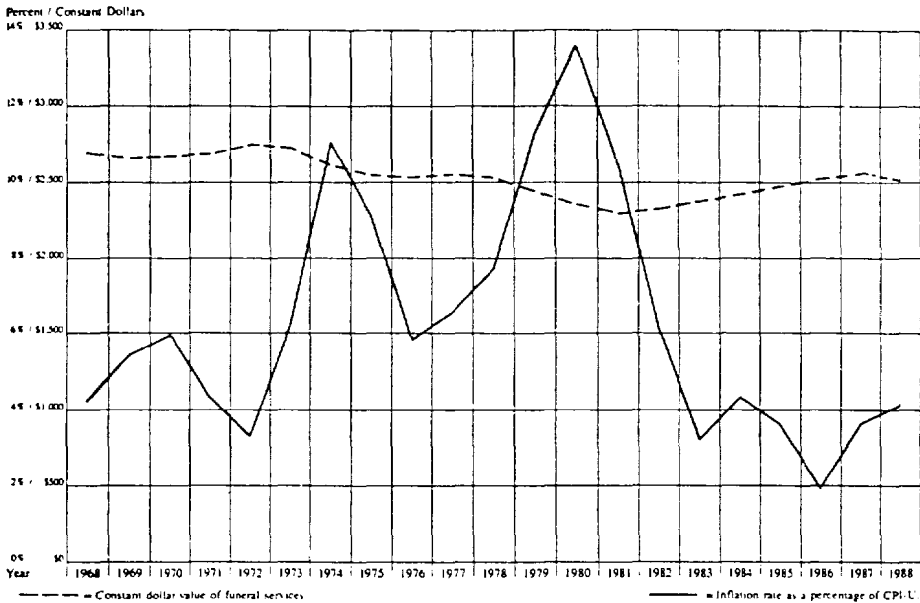
Year	Actual Funeral Prices	*Constant \$ Funeral Prices	CPI - U Annual Average	Percent Inflation CPI - U	Percent Change in Actual Funeral Prices
1968	\$936.07	\$2689.86	34.8	4.2	3.5
1969	974.01	2653.98	36.7	5.4	4.1
1970	1035.97	2670.03	38.8	5.9	6.4
1971	1088.00	2686.42	40.5	4.3	5.0
1972	1145.16	2739.62	41.8	3.3	5.3
1973	1207.78	2720.23	44.4	6.2	5.5
1974	1287.81	2612.19	49.3	11.0	6.6
1975	1369.75	2546.00	53.8	9.1	6.4
1976	1439.15	2529.26	56.9	5.8	5.1
1977	1542.50	2545.38	60.6	6.5	7.2
1978	1648.23	2527.96	65.2	7.7	6.9
1979	1772.22	2441.07	72.6	11.3	7.5
1980	1940.60	2355.10	82.4	13.5	9.5
1981	2085.66	2294.46	90.9	10.4	7.5
1982	2242.65	2323.99	96.5	6.1	7.5
1983	2367.17	2376.68	99.6	3.2	5.6
1984	2516.63	2422.16	103.9	4.3	6.3
1985	2656.22	2468.61	107.6	3.6	5.5
1986	2766.26	2523.96	109.6	1.9	4.1
1987	2904.64	2556.90	113.5	3.6	5.0
1988	2952.19	2529.32	118.3	4.1	3.0

Actual funeral price data were provided by Federated Funeral Directors of America.

\*Constant dollar funeral prices are calculated by dividing actual funeral prices by the CPI-U annual average.

**Table II**  
**Funeral Prices in Constant Dollars**  
**and the Inflation Rate**  
*(1968 to 1988)*

CHART IXB



Similarly, the comments of economists testifying on behalf of other parties to the proceedings in 1988 and 1989 must be questioned. Those economists generally represented the views and attitudes of their sponsoring organizations.

Thus, if it would benefit the organization in question, prices were shown to have increased as a result of the Rule. On the other hand, if it would benefit the organization to show that there had been no significant increase in prices, the testifying economist sought to so demonstrate or to show that any changes were insignificant. None of the parties to the funeral rule proceeding conducted a long-term constant dollar analysis of funeral costs and prices.

Therefore, the analyses are flawed because they are based on artificially depressed funeral prices caused by the high inflation rates of the immediately preceding years. This conclusion is demonstrated clearly by the data in Tables I, II, and V. The Baseline Study, using data collected in 1981 and 1982, reflected the low, ebb-tide of funeral charges. In real

constant dollar terms, funeral prices in 1981 and 1982 were just under and just over \$2,300 — the lowest constant dollar values in 20 years. In fact, those prices, in constant dollars, were more than \$300 less than the average constant dollar prices for 1968-1978.

The data also demonstrate:

- (1) Funeral prices increase less rapidly than the CPI-U or CPI-S in times of high inflation.
- (2) Funeral prices decline in real terms in times of high inflation.

**This analysis is solely that of the author and does not reflect policies or positions of the Casket Manufacturers Association of America. The author expresses his gratitude to Federated Funeral Directors of America for permission to use its data and to David Hazelett, Adrian Boylston, and Fred Vogel for comments, which improved this analysis.**

(3) Funeral prices rise at rates in excess of the CPI-U in times of lower inflation.

While the exact cause of the lag in funeral prices is unknown, educated speculation suggests:

(1) Funeral directors do not increase prices on multiple occasions in a given year in spite of inflationary pressures, which mandate more frequent or larger price increases.

(2) Funeral price increases may have been held in check by unit pricing practices. It might be difficult to justify ten-to-fifteen percent price increases with prices shown purely on product given the risk of serving the same family or friends of a family in a short period of time.

(3) Post-inflationary price increases, while higher than the CPI-U, are probably efforts to recoup prior or profit losses and gradually to achieve historic profit levels.

The data also clearly indicate that funeral profits have taken a disproportionate blow as a result of inflation and funeral director pricing policies. Profits, in real terms (CPI-U), have declined from \$341.75 in

**Table III**  
**COST OF FUNERAL SERVICE**  
**ADJUSTED FOR INFLATION\***

CHART IXC

Actual \$** Constant \$						Average Constant \$	1988 % Variation From Average	% Change 1968-'88
	1968	1973	1978	1983	1988			
<b>Operating Expenses</b>	639.05 1836.35	827.59 1863.94	1129.47 1732.32	1692.77 1699.57	2179.77 1842.58	1794.95	+2.7%	+0.3%
<b>Casket Cost</b>	178.09 511.75	221.87 499.71	304.56 467.12	408.12 409.76	517.05 437.07	465.81	-6.2%	-14.6%
<b>Total Cost</b>	817.14 2348.10	1049.46 2363.65	1434.03 2199.43	2100.89 2109.33	2696.82 2279.64	2260.03	+0.9%	-2.9%
<b>Funeral Price</b>	936.07 2689.86	1207.78 2720.23	1648.23 2527.96	2367.17 2376.96	2992.19 2529.32	2568.81	-1.5%	-6.1%
<b>Profit \$</b>	118.93 341.75	158.22 356.58	214.20 328.53	266.28 267.35	295.37 249.68	308.78	-19.1%	-26.9%
<b>Profit %</b>	12.7%	12.11%	13.0%	11.2%	9.9%			

CPI-U, U.S. City Average: 1968 - .348, 1973 - .444, 1978 - .652, 1983 - .996, 1988- 1.183, 1982-1984 - .00

\*\*All actual dollar data was provided by Federated Funeral Directors of America. Constant dollar data is derived by dividing actual dollars by the reported CPI index average for the appropriate year.

constant dollars in 1968 to \$249.68 in 1988 (see Table III). Profits were highest in 1973 when they totaled \$356.58 in real terms. (A more com-

plete analysis might show that profits were even higher in 1971 and 1972.)

Adding \$106.90 (CPI-U adjusted)

to the 1988 profit and to the total cost of the funeral for 1988 in constant dollars demonstrates that 1988

continued on page 62

**Table IV**  
**COST OF FUNERAL SERVICE**  
**ADJUSTED FOR INFLATION\***

Actual \$ Constant \$						1988 % Average Constant \$	Variation From Average	% Change 1968-'88
	1968	1973	1978	1983	1988			
<b>Operating Expenses</b>	639.05 2109.07	827.59 2063.82	1129.47 1857.68	1692.77 1702.99	2179.77 1734.10	1893.53	-8.4%	-17.8%
<b>Casket Cost</b>	178.09 587.76	221.87 553.29	304.56 500.92	408.12 410.58	517.05 411.34	492.78	-16.5%	-30.0%
<b>Total Cost</b>	817.14 2696.83	1049.46 2617.11	1434.03 2358.60	2100.89 2113.57	2696.82 2145.44	2386.31	-10.1%	-20.4%
<b>Funeral Price</b>	936.07 3089.34	1207.78 3011.92	1648.23 2710.90	2367.17 2381.46	2992.19 2380.42	2714.81	-12.3%	-22.9%
<b>Profit \$</b>	118.93 392.51	158.22 394.81	214.20 352.30	266.28 267.89	295.37 235.66	328.63	-28.3%	-40.0%
<b>Profit %</b>	12.7%	13.11%	13.0%	11.2%	9.9%	12.0%	-17.4%	

\*Consumer Price Index, ALL URBAN CONSUMERS, SERVICES, May 18, 1989

1968 - 30.3, 1973 - 40.1; 1978 - 60.8; 1983 - 99.4; 1988 - 125.7; 1982-1984 - 100

**Commonwealth of Pennsylvania  
Pre-need Burial Expense Funding Commission (?)  
Act \_\_\_\_ of 1994 Status Report**

Year of Report  
1997

**Section I - Identification Of Vendor**

\_\_\_\_\_ Business Name  
\_\_\_\_\_ Street Address  
\_\_\_\_\_ City, State Zip  
  
\_\_\_\_\_ PA Pre-need Registration Number  
\_\_\_\_\_ Federal EIN/SSN

**Section II - Nature of Business**

Check All That Apply

Funeral Director     Cemetery     Other \_\_\_\_\_ ( describe)

**Section III - Preneed Funding Arranged Currently or In Past**

Check All That Apply

Life Insurance     Annuities     Trust-pre '95     Trust Non-gteed     Trust Guaranteed

**Section IV - Preneed Products and Services Funded**

Check All That Apply

Merchandise     Services

I hereby certify that, to the best of my knowledge, the foregoing information is complete, true and accurate.

Name of Chief Executive or Administrative Officer of Vendor \_\_\_\_\_  
Signature \_\_\_\_\_  
Title of Officer \_\_\_\_\_  
Date \_\_\_\_\_



**Section V - Financial Data Post 94 Trust Assets - Guaranteed Contracts**

Valuation Date \_\_/\_\_/1997

**Statement of Net Assets Available to Fulfill Pre-funded Obligations**

Market Value		
Assets	Cash	\$ _____
	Money Market Funds	\$ _____
	Accrued Interest & Dividends	\$ _____
	US Government Securities	\$ _____
	Insured Certificates Banking Institutions	\$ _____
	Insured Savings Accounts - Banking Institutions	\$ _____
	Corporate Bonds	\$ _____
	Mutual Funds	\$ _____
	_____	\$ _____
	_____	\$ _____
	_____	\$ _____
	<b>Total Assets at Market</b>	<b>\$ _____</b>
Liabilities	Accounts Payable and Accrued Administrative Expenses	\$ _____
	_____	\$ _____
	<b>Total Current Liabilities</b>	<b>\$ _____</b>
	<b>Net Assets Available to Fulfill Pre-funded Obligations</b>	<b>\$ _____</b>

No assets are invested in debt or equity of any related organization, such as parent, subsidiary, brother/sister except as follows \_\_\_\_\_

No assets are invested in any entity manufacturing, selling or providing funeral/burial services or merchandise, cemetery lots or service, perpetual care funds, instalment contracts except as follows \_\_\_\_\_

Statement of Revenue and Expenses of Trust Fund for the 3 years Ended on Above Date

Net Assets 3 years Previous to Valuation Date	\$ _____
<b>Revenues</b>	\$ _____
New Contracts Sold	
Minimum Required \$ _____	
Actual Additions	\$ _____
Amortization Required Funding-Prior Report	
Minimum Required \$ _____	
Actual Additions	\$ _____
Interest Earnings	\$ _____
Dividend Payments	\$ _____
Realized Capital Gains	\$ _____
Other _____	\$ _____
Total Revenues	\$ _____
<b>Expenses</b>	
Contracts Matured By Death	
Guaranteed Retail \$ _____	
Amounts Withdrawn	\$ _____
Contracts Cancelled for Other Reasons	
Guaranteed Retail \$ _____	
Amounts Withdrawn	\$ _____
Administrative Expenses	
Paid to Vendor	\$ _____
Paid to Others	\$ _____
Realized Capital Losses	\$ _____
Other _____	\$ _____
Total Expenses	\$ _____
Net Change In Market Value ( Unrealized Gains/Losses)	\$ _____
Net Assets at End of 3 Year Period	\$ _____

We hereby certify that, to the best of our knowledge, the foregoing financial information is complete, true and accurate.

Name of Officer of Financial Institution \_\_\_\_\_  
 Signature \_\_\_\_\_  
 Name of Institution \_\_\_\_\_  
 Title of Officer \_\_\_\_\_  
 Address \_\_\_\_\_  
 Date \_\_\_\_\_ Phone (\_\_\_\_) \_\_\_\_\_

Name of Chief Financial Officer of Vendor \_\_\_\_\_  
 Signature \_\_\_\_\_  
 Title of Officer \_\_\_\_\_  
 Date \_\_\_\_\_

**Section VI - Actuarial Determination**

Actuarial Reserve Based  
On Sales Percentage of \_\_\_\_  
On Retail Price

**List of Guaranteed Contracts Entered into After 1/1/95**

Identification (Unique Contract #)	<u>Birth Year</u>	<u>Contract Year</u>	<u>Retail Price Contract Year</u>	<u>Retail Price Valuation Date</u>	<u>Actuarial Reserve</u>
---------------------------------------	-------------------	----------------------	---------------------------------------	----------------------------------------	------------------------------

1  
2  
3  
4  
5  
6

( use continuation sheet if necessary)

Totals \$ \_\_\_\_\_ \$ \_\_\_\_\_

**Amortization of Surplus or Deficit**

Actuarial Reserve as of \_\_/\_\_/1997 ( above) \$ \_\_\_\_\_

Net Assets as of same date (section V) \$ \_\_\_\_\_

Surplus  Deficit ( indicate which) \$ \_\_\_\_\_

Amortization Per Year ( X 1/5) \$ \_\_\_\_\_

Check One

Additional Funding  Reduced Funding

**Professional Certification**

I hereby certify that I have prepared and reviewed the actuarial data and information entered in this Section VI, using the actuarial factors prepared by the Commission and that the data and information provided is to the best of my knowledge true and accurate.

I further certify that I am

- An Enrolled Actuary pursuant to ERISA , Enrolment Number \_\_\_\_\_
- A Certified Public Accountant, Licensed to Practice in Pennsylvania
- A Licensed Public Accountant, Licensed to Practice In Pennsylvania

Name of Professional \_\_\_\_\_  
Signature \_\_\_\_\_  
Name of Firm \_\_\_\_\_  
Address \_\_\_\_\_  
Date \_\_\_\_\_ Phone (\_\_\_\_) \_\_\_\_\_

Calendar Age	Percentage	Calendar Age	Percentage	Calendar Age	Percentage
0	35.83%	37	57.40%	76	86.45%
1	35.54%	38	58.15%	77	87.06%
2	35.99%	39	58.91%	78	87.67%
3	36.47%	40	59.67%	79	88.26%
4	36.96%	41	60.44%	80	88.83%
5	37.47%	42	61.22%	81	89.38%
6	37.99%	43	61.99%	82	89.91%
7	38.52%	44	62.77%	83	90.41%
8	39.05%	45	63.56%	84	90.89%
9	39.60%	46	64.34%	85	91.35%
10	40.16%	47	65.13%	86	91.79%
11	40.73%	48	65.92%	87	92.20%
12	41.30%	49	66.71%	88	92.59%
13	41.88%	50	67.49%	89	92.96%
14	42.47%	51	68.28%	90	93.31%
15	43.05%	52	69.07%	91	93.65%
16	43.63%	53	69.85%	92	93.96%
17	44.21%	54	70.64%	93	94.25%
18	44.80%	55	71.42%	94	94.51%
19	45.39%	56	72.20%	95	94.74%
20	45.98%	57	72.98%	96	94.95%
21	46.58%	58	73.75%	97	95.14%
22	47.19%	59	74.52%	98	95.30%
23	47.80%	60	75.28%	99	95.46%
24	48.42%	61	76.04%	100	95.60%
25	49.05%	62	76.79%	101	95.74%
26	49.69%	63	77.59%	102	95.88%
27	50.34%	64	78.27%	103	96.04%
28	51.00%	65	79.00%	104	96.20%
29	51.68%	66	79.72%	105	96.41%
30	52.36%	67	80.44%	106	96.69%
31	53.05%	68	81.15%	107	97.08%
32	53.75%	69	81.85%	108	97.67%
33	54.47%	70	82.54%	109	98.58%
34	55.19%	71	83.22%		
35	55.92%	72	83.89%		
36	56.66%	73	84.54%		
		74	85.18%		
		75	85.82%		