EXH. C

Safeway, Inc.

All Santa Cruz County Locations

2017 Assessment Appeals

Applications

078-17
079-17
080-17
081-17
082-17
083-17

Account Numbers

07316-00-9
07318-00-3
07510-00-3
07314-00-5
07319-00-0
07315-00-2

Applicant's Representative

Brent Buskirk, Agent
Property Tax Assistance Co., Inc.
16600 Woodruff Ave.
Bellflower, CA 90706
(562) 920-1864

R3 Curve

Hearing Date 9/17/18

Exhibit C

ASSESSORS' HANDBOOK
SECTION 504

ASSESSMENT OF PERSONAL PROPERTY AND FIXTURES

OCTOBER 2002

CALIFORNIA STATE BOARD OF EQUALIZATION

Percent Good Factors

In a mass appraisal program, percent good factors are frequently used in estimating depreciation. Percent good, as a percentage, is the complement of depreciation. For example, if total depreciation is 20 percent, then percent good is 80 percent. The percent good concept is used in the appraisal process for two reasons: (1) it focuses the appraisal on the benefits remaining or the economic life remaining in the property rather than the benefits used; and (2) it saves one arithmetical operation when estimating market value.

Percent good factors are provided by the Board in AH 581, *Equipment Index and Percent Good Factors,*[149] for use in valuing personal property and fixtures. In general, an average service life[150] estimate is needed in order to utilize the table. In mass appraisal situations, estimating life for each piece of equipment is not practical; therefore, service life is not generally estimated on an individual basis. (It may occur in practice, however, when the assessee files an appeal, when an audit is conducted, or when equipment is self-constructed.) Average service life can be estimated by an appraiser based on a mortality study of individual acquisitions and retirements (see Appendix I), historical usage of property, useful life expectancy as reflected by the applicable industry, or other information as available. When an item is not new, the tables may be applicable based on the item's *remaining economic life*[151] since the remaining economic life is usually greater than the original average service life minus age. This occurs because in any group of equipment, some items "die" prematurely, so the life of the remaining items would generally exceed the average service life.

Any percent good table or depreciation schedule, including those published by the Board, should be used only as a guide in the estimation of value. They may reflect more or less depreciation than the actual market indicates. If equipment has experienced abnormal, excessive, or even less-than-expected depreciation, the percent good factors may not be reliable. In this case, a percent good factor could be used in combination with another method of depreciation calculation, or it may be necessary to use another approach to value altogether. This is also true if the equipment is unique, if limited cost information is available, or if age or expected life estimates cannot be accurately determined. There may be instances when an appraiser should verify reproduction or replacement cost new less depreciation by other approaches before accepting a mass-appraisal indicator such as the indicator developed from an AH 581 table as the best indicator.

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[149] AH 582 discusses derivation of the percent good factors included in AH 581.
[150] The average life term of a group of items.
[151] The expected remaining life of the property on the appraisal date.

Sampling

Indexes published in AH 581 are based on government price indexes derived by market sampling. When necessary, and resources are available, the assessor may conduct similar such studies to derive his or her own indexes.

In order to promote uniformity in appraisal practices and values throughout the state, the Board issues information and data relating to commercial and industrial property. This information includes, but is not limited to, appropriate index factors and percent good factors. Most counties do not have the staff to conduct independent and statistically sound sampling procedures to develop their own valuation factors. Moreover, when counties develop and use different valuation factors for property, value inequities may result between counties for the same type of property.

Most notably, where the equipment index and percent good factors provided by the Board and other approaches to value and methods of estimating depreciation are not good indicators of value, an assessor may wish to use some type of sampling methodology to develop his or her own factors. To use sampling, assessors and auditors must develop and use recognized methods that will be accepted with confidence by the Board and assessees. In developing a sample plan, technique, and program, an interested reader should consult a textbook on statistics for information on the theory and application of sampling. For an example, see the Board's *Sales and Use Tax Audit Manual*, Chapter 13: *Statistical Sampling.*

Straight-Line or Age-Life Method

Under this approach, depreciation is estimated by dividing the actual or effective age of the property by the estimated economic life. The straight-line or age-life method is based on the relationship between physical age and estimated economic life. Physical life, or age, is the time the equipment has existed. Economic life of a property represents the period of time during which the property has value.

Although straight-line depreciation may have little or no bearing on market value, effective age should be recognized whenever data reasonably indicates that effective age is different than actual age. *Effective age* is the "age indicated by the condition and utility of a structure"[152] (or property). Because there may be a large variation in the condition of property having the same age, the effective age (as opposed to the actual age) is the best indicator of the market's perception of age.

This approach does not reflect the relationship between the present worth of the future earnings of the property versus the present worth of future earnings of a new replacement property. It ignores the principle that money has a time value (income earned in the near future has a greater value than the same amount of income to be earned in the distant future). Thus it tends to understate the economic value of older property that is producing a current income comparable to the current income that would be produced by a new replacement. Conversely, this method

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[152] Appraisal Institute, *The Dictionary of Real Estate Appraisal*, s.v. "effective age."

GLOSSARY OF TERMS

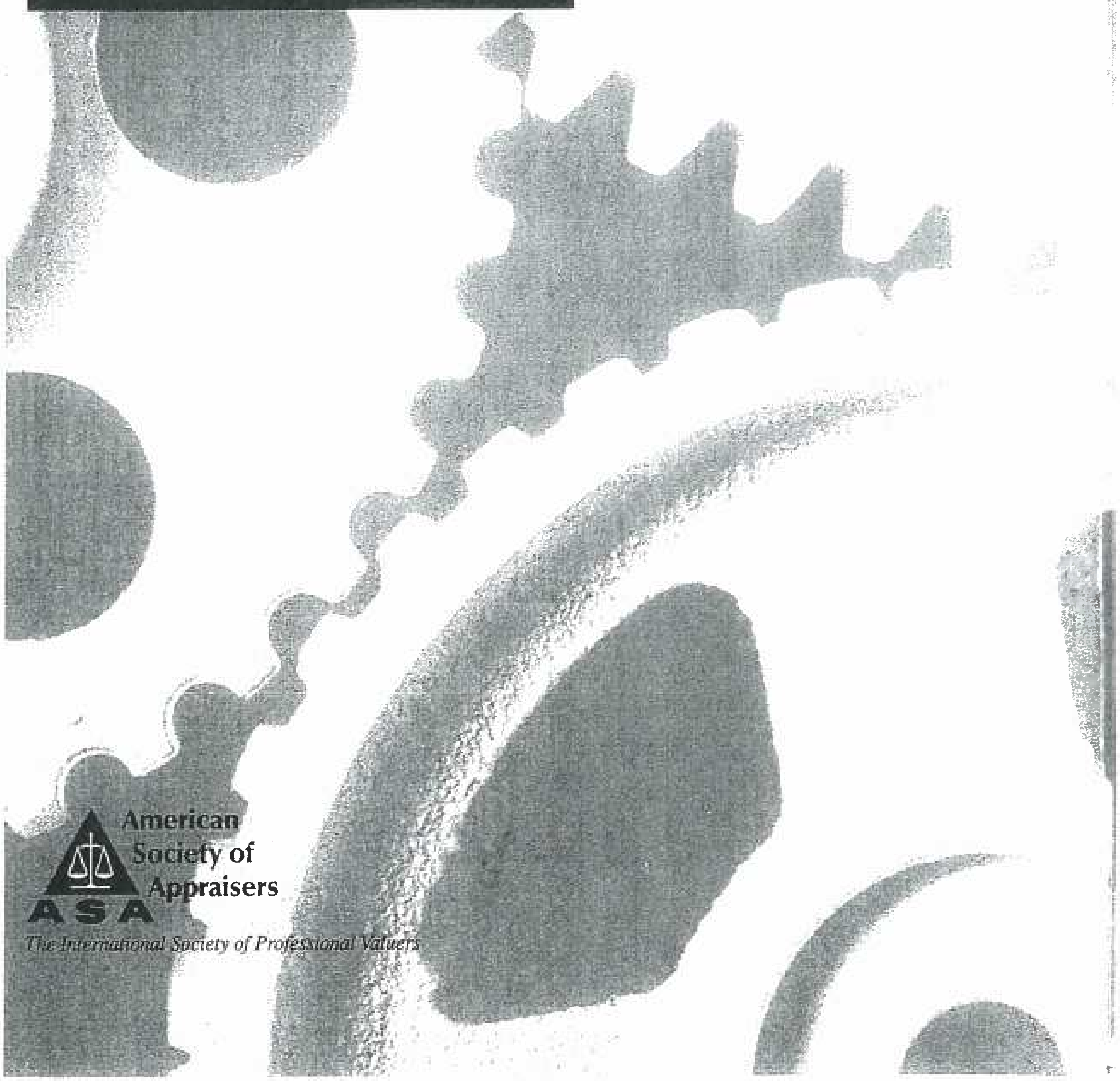
Term	Definition
Air Taxi	Aircraft used by an air carrier which (1) does not utilize aircraft having a maximum passenger capacity of more than 30 seats, (2) does not have a maximum payload capacity of more than 7,500 pounds in air transportation, and (3) which does not hold a certificate of public convenience and necessity or other economic authority issued by the Civil Aeronautics Board of the United States, or its successor, or by the California Public Utilities Commission, or its successor.
Aircraft	Also referred to as general aircraft. Any contrivance used or designed for the navigation of or for flight in the air which has been flown at least once. It is not a parachute or similar emergency safety device, rockets or missiles, or certificated aircraft or scheduled air taxis.
Annuity	A periodic series of obligatory payments; an annuity can be level, increasing, decreasing, or a combination thereof.
Apportionment	Process used to allocate or eliminate, based on the time of presence, the assessments or the taxes for time spent out of state.
Appraisal Unit	The unit that (1) people in the market typically buy and sell or (2) that is normally valued separately.
Assessed Value	The taxable value of a property against which the tax rate is applied.
Assessee	Person who owns, claims, possesses, or controls the property on the lien date.
Assessment Roll	A listing of all taxable property within a county. It identifies, at a minimum: (1) the property (usually by assessor's parcel number), (2) the tax-rate area where the property is located, (3) the name (if known) and mailing address of the assessee, (4) the assessed value of the property, including separate assessed values for land, improvements, and personal property, (5) penalties (if any), and (6) the amount (if any) of specified exemptions (e.g., Homeowners', Church, Welfare, etc.). Distinct assessment rolls include the locally-assessed secured and unsecured regular assessment rolls, the locally-assessed supplemental assessment roll, and the state-assessed roll (which is added to the locally-assessed secured roll).
Audit	Means of collecting data relevant to the determination of taxability, situs, and value of property.
Audit Program	System used to select and conduct audits.
Average Service Life	The average life term of a group of items.

Term	Definition
Confidence Interval	Describes the limits of accuracy of an inference. This precision interval is a statistical measure of the inability to predict the true population error because the test is based on a sample rather than a census.
Confidence Level	An inference from a sample that tells the proportion of times a statement about the population is likely to be true in the long run.
Confidence Limits	Confidence interval expressed as a range, the lower and upper bound on the confidence interval.
Cost	The expenditure required to develop and construct an improvement or acquire personal property.
Cost Approach	A value approach using the following procedures to derive a value indicator: (1) estimate the current cost to reproduce or replace an existing property without untimely delays, (2) deduct for all accrued depreciation, and (3) add an amount to compensate for entrepreneurial profit (if present).
Data	Factual information used as a basis for analysis.
Depreciation	A decrease in utility resulting in a loss in property value; the difference between estimated replacement or reproduction cost new as of a given date and market value as of the same date. There are three principal categories of depreciation: physical deterioration, functional obsolescence, and external obsolescence.
Direct Billing	System developed and implemented by an assessor to appraise selected accounts periodically, in lieu of annual property statements.
Direct Capitalization	A capitalization method used to convert a single year's income expectancy into an indicator of value, either by dividing the income estimate by an appropriate rate or by multiplying the income estimate by an appropriate factor.
Direct Costs	Expenditures required for the labor and materials necessary to develop and construct an improvement (or personal property); sometimes referred to as "hard costs."
Documented Vessel	Any vessel which is required to have and does have a valid marine document issued by the Bureau of Customs of the United States or any federal agency successor or DMV.
Economic Life	Useful or profitable life of property, which may be shorter than the physical life.
Economic Obsolescence	See *External Obsolescence.*

Valuing Machinery and Equipment: The Fundamentals of Appraising Machinery and Technical Assets

Second Edition

American Society of Appraisers



American Society of Appraisers
ASA
The International Society of Professional Valuers

is often the more appropriate numerator in the age/life ratio than is chronological age.

Normal useful life is the estimated number of years that a new property will actually be used before it is retired from service. A property's normal useful life relates to how long similar properties actually tend to be used, as opposed to the more theoretical economic life calculation of how long a property can profitably be used. The best evidence of normal useful life is statistical or actuarial data derived from the study of properties that are similar to the subject under actual operating conditions. An asset's useful life may be longer than its *economic life* because the owner may elect not to retire the asset from service upon expiration of the asset's theoretical economic life.

Remaining useful life is the estimated period during which a property of a certain effective age is expected to actually be used before it is retired from service. The best evidence of remaining useful life is statistical or actuarial data derived from the study of properties that are similar to the subject under actual operating conditions. Remaining useful life can sometimes be approximated by deducting the asset's *effective age* from its *normal useful life*; however, this is an over-simplification and not technically correct in some situations, for the same reason that a person who had a 72-year life expectancy when born, and is now 70 years old, has more than a 2-year remaining life expectancy according to human mortality tables. Statistical and actuarial studies of asset useful lives indicate that many assets follow a similar pattern.

Physical life is the estimated number of years that a new property will physically endure before it deteriorates or fatigues to an unusable condition purely from physical causes, without considering the possibility of earlier retirement due to functional or economic obsolescence.

ASSESSORS' HANDBOOK
SECTION 582

THE EXPLANATION OF THE DERIVATION OF EQUIPMENT PERCENT GOOD FACTORS

FEBRUARY 1981

REPRINTED AUGUST 1997

CHAPTER 3: THE ORGANIZATION OF THE IOWA STATE TABLES

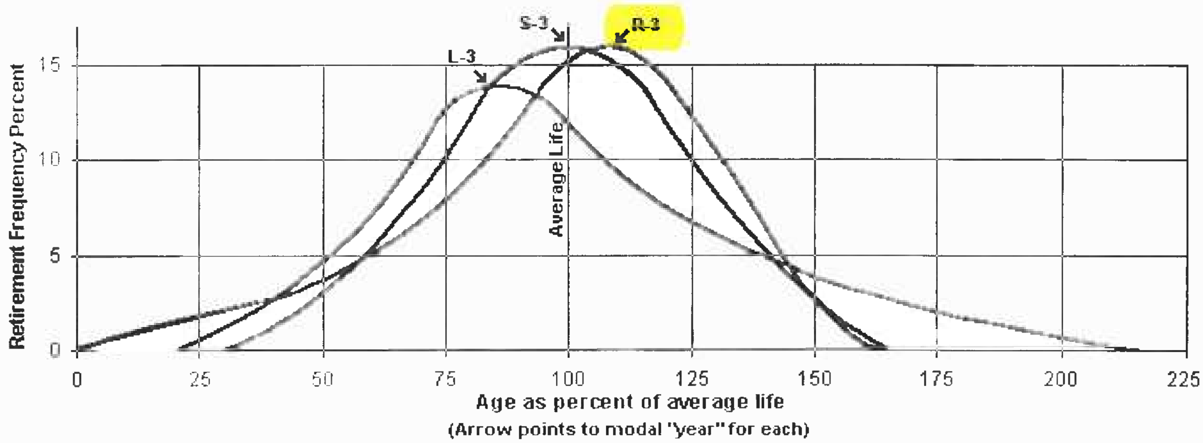
Iowa State University studied large numbers of groups of industrial equipment items, primarily from public utility properties. By identifying large numbers of like property items installed approximately at the same time and recording the date of all retirements, they were able to compile all of the necessary statistical data to formulate a series of equipment mortality tables. These tables were refined, and a series of 18 different sets of curves were developed. These curves were then organized according to variations in retirement frequency and labeled using a two-part designation system.

"R," " S," AND "L" CURVES

First, the 18 sets of curves were divided into three categories according to the relationship of the modal year to the average service life of the group. Figure II illustrates typical examples of the three types of curves.

FIGURE II

COMPARISON OF THREE RETIREMENT FREQUENCY CURVES



Seven curves in which the modal year and the average life are the same are labeled "S" and form a symmetrical retirement frequency curve. Six curves have a modal year that is to the left of the average life and are labeled "L." Five more curves are labeled "R" and have a modal year that is to the right of the average life.

The position of the mode relative to the average life is a result of the pattern of retirement frequency over the life of the group of property items. In the "R" curves, the greatest frequency of retirements is after the life term is reached. This causes the retirement frequency curve to be skewed to the right. In other words, the majority of items in this group will last longer than the average life, but most of them will be retired in a short period of time after the average life term is reached.

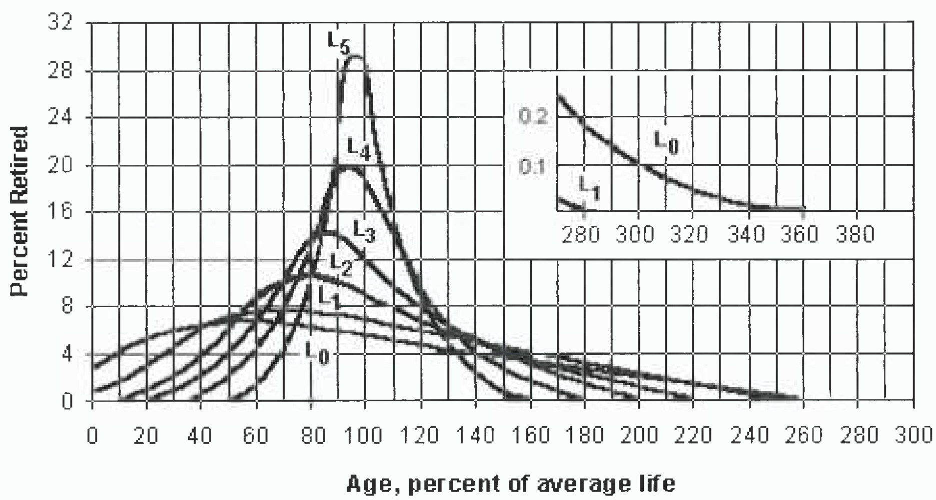
The "L" curves, on the other hand, indicate the greatest frequency of retirements is prior to the average life. Though a minority of items will be in existence for a long time, the majority of units in this case are retired prior to the average life of the group. In other words, more than half do not reach the age of the average of the group. The minority that do last longer than the average survive for a long time and compensate for the early losses.

In the "S" tables, the modal year and the average life are the same thus producing a symmetrical curve. Half of all items are retired prior to the average life, and an equal amount are retired after the average life term is reached. The pattern of retirements prior to the modal year is exactly the reverse of the pattern after the modal year.

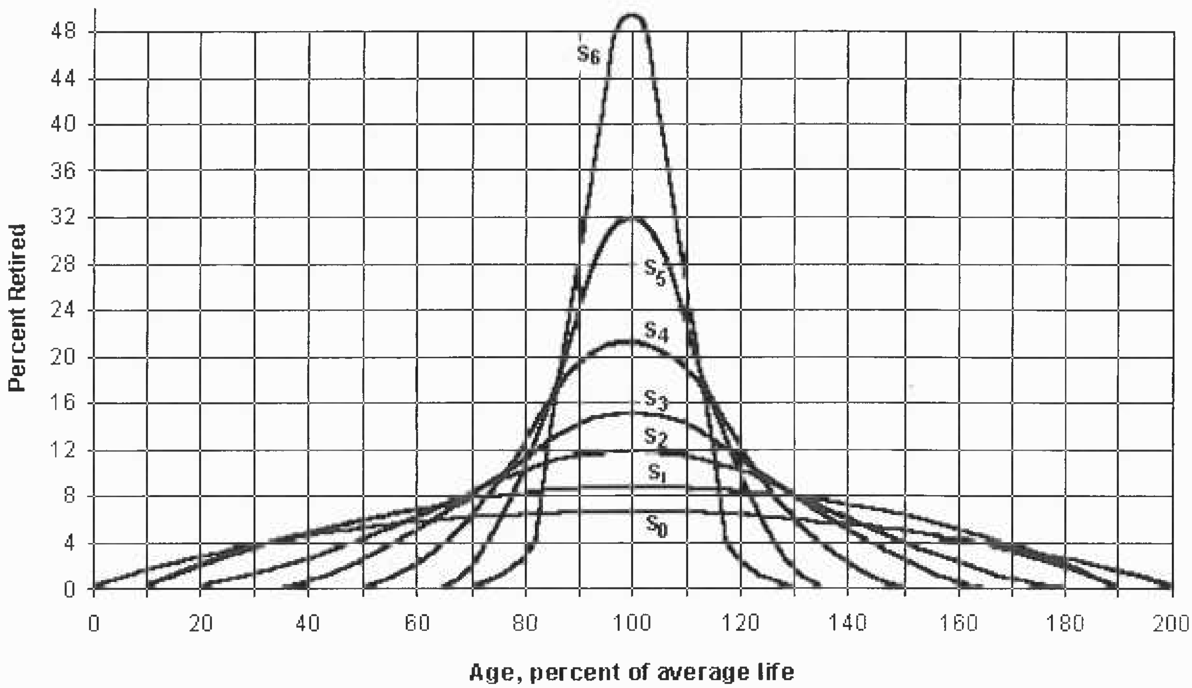
VARIATIONS DUE TO MODAL YEAR RETIREMENT FREQUENCY

Each set of the three types of frequency contains curves that vary with the height of the curve in the modal year. Figure III illustrates the three sets of curves.

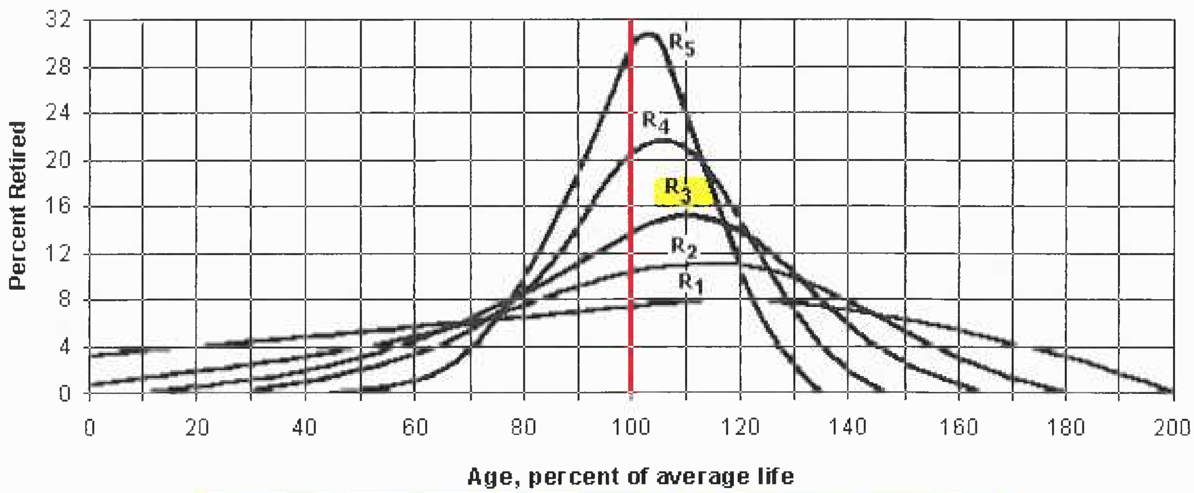
FIGURE III



Left mode type survivor, probable life, and frequency curves



Symmetrical type survivor, probable life, and frequency curves.



Right mode type survivor, probable life, and frequency curves

As you can see, curves are numbered with the lowest number having the lowest frequency of retirement at the modal year, and the highest number has the greatest frequency of retirements in the modal year. An "S-1" curve is a symmetrical curve with a low frequency of retirements in the modal year, and an "R-5" is a curve which is skewed to the right and has a high frequency of retirements in the modal year.

The Scope of the Iowa Curves

The 18 curves published by Iowa State University cover the full spectrum of typical variations in retirement patterns . These curves range from sets where the greatest number of retirements are early in life to sets where the most frequent retirements are late in the life term and from sets with low retirement frequencies in the modal year to sets with high modal year frequencies.

The curves contain the necessary relationships to compute percent good tables; namely, average service life, probable total life expectancy at all ages, and retirement frequencies. To compute a table for a particular property type, the appraiser must consider the retirement pattern of the property in question and select the curve that most nearly fits this pattern.

CHAPTER 4: COMPUTING PERCENT GOOD

As previously stated on page 1, the computation of percent good in its simplest form is the present worth of one per annum for the remaining life expectancy discounted at an appropriate yield rate and divided by a similarly discounted income of one per annum for the total life expectancy of the item. This method is called the individual method of computing percent good. A more complex method of computing percent good, called the group method, is also often used and will be discussed later.

For those who are mathematically inclined, a formula for computing percent good using the individual method may be developed as follows:

Let r = Rate of Return
Let n = Probable Total Life Expectancy at Age a
Let a = Age

$$\text{Percent Good} = \frac{\text{PW 1 Per Annum for n-a Years at r Percent}}{\text{PW 1 Per Annum for n Years at r Percent}}$$

$$\text{Percent Good} = \frac{(1+r)^{n-a} - 1}{r\,(1+r)^{n-a}} \div \frac{(1+r)^{n} - 1}{r\,(1+r)^{n}}$$

$$\text{Percent Good} = \frac{(1+r)^{n-a} - 1}{r\,(1+r)^{n-a}} \times \frac{r\,(1+r)^{n}}{(1+r)^{n} - 1} \quad \text{(Invert \& Multiply)}$$

$$\text{Percent Good} = \frac{(1+r)^{n-a} - 1}{(1+r)^{n-a}} \times \frac{(1+r)^{n}}{(1+r)^{n} - 1} \quad \text{(Cancel ``r'')}$$

$$\text{Percent Good} = \frac{(1+r)^{a-n}\ [(1+r)^{n-a} - 1]\ (1+r)^{n}}{(1+r)^{a-n}\ (1+r)^{n-a}\ [(1+r)^{n} - 1]} \quad \text{Multiply by } \frac{(1+r)^{a-n}}{(1+r)^{a-n}}$$

$$\text{Percent Good} = \frac{[(1+r)^{a-n+n-a} - (1+r)^{a-n}]\ (1+r)^{n}}{(1+r)^{a-n+n-a}\ [(1+r)^{n} - 1]}$$

$$\text{Percent Good} = \frac{[(1 - (1+r)^{a-n}]\ (1+r)^{n}}{1\ (1+r)^{n} - 1} \quad \text{(Multiply out numerator \& denominator)}$$

$$\text{Percent Good} = \frac{(1+r)^{n} - (1+r)^{a}}{(1+r)^{n} - 1}$$

The use of the final formula greatly simplifies the arithmetic in computing factors. As you can see, it is consistent with the basic principle of using present worth factors for computing percent good as described on page 1.

INCOME ADJUSTMENT FACTORS

A new, modern functionally efficient plant will usually earn a larger net income than a similar older plant. The simple percent good calculation demonstrated previously considers the relationship between two constant income streams. There are several procedures for compensating for decreasing net income in older industrial property. Compensating for decreasing net income can be done by simply assigning an income of one per annum to the income stream for the new property and something less than one as the income for the old property.

The percent good factors in Assessors' Handbook Section 581, *Equipment Index Factors and Inventory Ratios*, utilize an income adjustment factor that amounts to a reduction of income equal to 1 percent for every 10 percent of average life expectancy. If the average life expectancy is 20 years and the property is 2 years old, the income reduction is 1 percent, and the income adjustment factor is .99 (1.00 -.01 = .99). This factor is then applied to the income stream that is discounted over the remaining life term of the property.

Then:

$$\text{Percent Good} = \frac{\text{PW of 1 Per Annum for n-a Years x .99}}{\text{PW of 1 Per Annum for n Years x 1}}$$

Note that in calculating the income adjustment factor, we always use the average life expectancy of a new item as its total life term. On the other hand, when we calculate a percent good factor, we always use the total life expectancy at its current age as its total life term.

A formula for calculating the income decline factor can be derived as follows:

Let A = Average Service Life Expectancy New
Let a = Age

Then:

$$\text{Income Adjustment Factor} = 1 - \frac{a}{A} \times \frac{.01}{.10}$$

$$\text{Income Adjustment Factor} = 1 - \frac{.01a}{.10A}$$

$$\text{Income Adjustment Factor} = 1 - \frac{.1a}{A}$$