DIVISION 308
ASSESSMENT OF PROPERTY FOR TAXATION

150-308.057

Continuing Education Requirements for Assessors and Appraisal Supervisors

Definition: Continuing education credits equal the number of hours in a course or presentation approved for continuing education unless otherwise specified by rule.

Policy Statement: Continuing education is required of assessors and appraisal supervisors as a part of Chapter 796 Oregon Laws 1989. This requirement was adopted by the legislature in order to promote professional management of mass appraisal and to help ensure efficient and effective county operation in assessment and taxation throughout the state.

(1) Appraisal supervisors means employees classified in the county's management personnel category who supervises appraisal staff.

(2) Assessors, directors of assessment and taxation, and appraisal supervisors must have 15 credits of technical training, 15 credits of management training and 15 credits which they can allocate in any combination of technical or management credits for a total of 45 credits every two years. Newly appointed or elected assessors or appraisal supervisors must complete 20 credits of technical training, 20 credits of management training and 20 credits which they can allocate in any combination of technical or management credits for a total of 60 credits within the first two calendar years following their appointment or election.

Continuing Education Requirements

(Present and Proposed)

7-15-93

Assessor/Appraisal Supervisor Matrix

Now

		Credits							
		30T	30M	30T	30M	15T	30M	15T	15M
Assessors/Directors	Year	1–2		3–4		5–6		7–8	

Now

		Credits							
		30T/15M	30T/15M	30T/15M	30T/15M	30T	15M	30T	15M
Appraisal Supervisors	Year	1	2	3	4	5–6		7–8	

Proposed

		Credits			
		20T/20M/20M or T (3)	15M/15T/15M or T	15M/15T/15M or T	15M/15T/15M or T
Assessors/Directors & Appraisal Supervisors	Year	1–2	3–4	5–6	7–8

(4) 60 credits total are required during the first two calendar years following election or appointment. Credits include 20 technical, 20 management, and 20 in any combination of management and technical credits.

(a) Technical training must be in the area of assessment and taxation such as appraisal, budgets, ratio studies, and tax rate computation. A minimum of 15 credits of technical training must be completed every two years. Assessors, directors of assessment and taxation, and appraisal supervisors must complete a course in Basic Mass Appraisal.

(b) Management training must be in the area of personnel relations (hiring, discipline, dismissals) office management and management of an appraisal program. A minimum of 15 credits of management training must be taken every two years.

(3) Completion of the continuing education requirements under this rule for assessors, directors of assessment and taxation, and appraisal supervisors shall be considered to meet the continuing education requirements of ORS 308.010(4)(a).

(4) Tax collector and management positions in tax collector's office.

In order to maintain a high degree of technical and management competency, each tax collector and persons in management positions in that office should meet the same continuing education requirements outlined for assessor's offices.

Stat. Auth.: ORS 305.100
Stats. Implemented: ORS 308.057
Hist.: RD 3-1989, f. 12-18-89, cert. ef. 12-31-89; RD 11-1990, f. 12-20-90, cert. ef. 12-31-90; RD 6-1993, f. 12-30-93, cert. ef. 12-31-93, Renumbered from 150-308.057-(A)

150-308.059-(A)

Continuing Education Requirement for Nonappraisal Managers

Definition: Continuing education credits equal the number of hours in a course or presentation approved for continuing education unless otherwise specified by rule.

(1) Nonappraisal management positions means county management staff who supervise personnel other than appraisers.

(2)(a) Nonappraisal managers in the assessors' and tax collectors' offices, such as office deputy or deputy tax collector, are subject to continuing education requirements.

(b) Determination of whether other county nonappraisal managers, including those in departments of A & T, are subject to continuing education requirements shall be made by the manager responsible for the operations of the county department. Examples of nonappraisal managers who may not be subject to education requirements might include data entry managers, some data processing managers or administrative support supervisors.

(3) Nonappraisal managers are required to successfully complete 30 credits of approved education every 2 years in any combination of technical or management credits. In the first 2 years following their appointment, 15 class credits must be management credits.

Continuing Education Requirements

(Present and Proposed)

Nonappraisal Managers Matrix

Now

		Credits							
		15T	15M	15T	15M	15T	15M	15T	15M
Nonappraisal Managers	Year	1–2		3–4		5–6		7–8	

Proposed

		Credits			
		30 (M or T) (4)	30 (M or T)	30 (M or T)	30 (M or T)
Nonappraisal Managers	Year	1–2	3–4	5–6	7–8

(4) May take any combination of technical or management credits.
During the first two years following appointment, 15 credits must be management.

Stat. Auth.: ORS 305.100
Stats. Implemented: ORS 308.059
Hist.: Hist.: RD 3-1989, f. 12-18-89, cert. ef. 12-31-89, Renumbered from 150-308.059; RD 11-1990, f. 12-20-90, cert. ef. 12-31-90; RD 8-1991, f. 12-30-91, cert. ef. 12-31-91; RD 8-1992, f. 12-29-92, cert. ef. 12-31-92; RD 6-1993, f. 12-30-93, cert. ef. 12-31-93

150-308.149(6)

Minor Construction

(1) Definition: “Minor construction” is an improvement to real property that results in an addition to real market value (RMV), but does not qualify as an addition to maximum assessed value (MAV) due to a value threshold. The value threshold is an RMV of over $10,000 in any one assessment year, or over $25,000 for all cumulative additions made over five assessment years.

(2) Minor construction does not include general ongoing maintenance and repairs.

(3) When testing the over $25,000 threshold, use the cumulative RMV of all minor and major construction over a period not to exceed five consecutive assessment years.

(a) Minor and major construction values are not market trended.

(b) Values for retirements are not considered in the threshold test.

(c) Values for minor construction items that are removed or destroyed prior to being an adjustment to MAV are subtracted from the minor construction cumulative RMV.

(4) Once the over $25,000 threshold is met, use the following steps to calculate the MAV adjustment:

(a) Use minor construction values that are not market trended.

(b) Make adjustments for any retirements from the prior assessment year. The net value of additions and retirements can not go below zero.

(c) Apply the changed property ratio (CPR) from the year the cumulative RMV becomes an addition to MAV.

(d) Reset the cumulative RMV for minor construction to zero and restart the five-year period.

(5) For implementation of the five-year period, the first year is 1997-98 reflecting minor construction added after July 1, 1995, and on or before July 1, 1997.

The following examples demonstrate the over $25,000 threshold. *RMVs in the following examples are not market trended and/or depreciated.*

Example 1—Over $25,000 Not Met

Year	New Imps. Value	Cumulative Total	Comment
1	$8,000	$8,000	Does not qualify as an adjustment to MAV. Individual year RMV is under $10,001 and cumulative RMV is under $25,001.
2	None	$8,000	No change.
3	$7,000	$15,000	Does not qualify as an adjustment to MAV. Individual year RMV is under $10,001 and cumulative RMV is under $25,001.
4	None	$15,000	No change.
5	$5,000	$20,000	Does not qualify as an adjustment to MAV. Individual year RMV is under $10,001 and cumulative RMV is under $25,001.

Example 2—Over $25,000 Not Met, Prior Years Drop Off

Year	New Imps. Value	Cumulative Total	Comment
1	$8,000	$8,000	Does not qualify as an adjustment to MAV. Individual year ` RMV is under $10,001 and cumulative RMV is under $25,001.
2	None	$8,000	No change.
3	$5,000	$13,000	Does not qualify as an adjustment to MAV. Individual year RMV is under $10,001 and cumulative RMV is under $25,001.
4	None	$13,000	No change.
5	$7,000	$20,000	Does not qualify as an adjustment to MAV. Individual year RMV is under $10,001 and cumulative RMV is under $25,001.
6	$11,000	$23,000	Year 6 qualifies individually as it is over $10,000. Prior years still do not qualify, as 5 year cumulative total is under $25,001. (Year 1 has dropped off the 5 year accumulation. $11,000 * CPR = adjustment to MAV.)

Example 3—Cumulative RMV Reset

Year	New Imps. Value	Cumulative Total	Comment
1	$8,500	$8,500	Does not qualify as an adjustment to MAV. Individual year RMV is under $10,001 and cumulative RMV is under $25,001.
2	$100,000	$108,500	Year 2 qualifies individually as RMV is over $10,000. Year 1 qualifies as 5 year cumulative total is over $25,000. $108,500 * CPR = adjustment to MAV. Cumulative total and five-year period reset for the next year.
1	$9,500	$9,500	Cumulative total and five-year period have reset. Does not qualify as an adjustment to MAV. Individual year RMV is under $10,001 and cumulative RMV is under $25,001.

Example 4—Cumulative RMV Reset

Year	New Imps. Value	Cumulative Total	Comment
1	$8,000	$8,000	Does not qualify as an adjustment to MAV. Individual year RMV is under $10,001 and cumulative RMV is under $25,001.
2	$5,000	$13,000	Does not qualify as an adjustment to MAV. Individual year RMV is under $10,001 and cumulative RMV is under $25,001.
3	$15,000	$28,000	Year 3 qualifies individually as is over $10,000. Years 1 and 2 qualify as 5 year cumulative total is over $25,000. $28,000 * CPR = adjustment to MAV. Cumulative total and five-year period reset for the next year.
1	None	$0	Cumulative total and five-year period have reset.

Example 5—Individual Year and Cumulative Year Adjustments

Year	New Imps. Value	Cumulative Total	Comment
1	$5,000	$5,000	Does not qualify as an adjustment to MAV. Individual year RMV is under $10,001 and cumulative RMV is under $25,001.
2	None	$5,000	No change.
3	$15,000	$20,000	Year 3 qualifies individually as RMV is over $10,000. Year 1 does not qualify as cumulative RMV is under $25,001. $15,000 * CPR = adjustment to MAV.
4	$7,000	$27,000	Years 4 and 1 qualify as cumulative RMV is over $25,000. $12,000 * CPR = adjustment to MAV. Cumulative total and five-year period reset for the next year.
1	None	$0	Cumulative total and five-year period have reset.

Example 6—Removal of Destroyed Minor Construction

Year	New Imps. Value	Cumulative Total	Comment
1	$8,000	$8,000	Does not qualify as an adjustment to MAV. Individual year RMV is under $10,001 and cumulative RMV is under $25,001.
2	$5,000	$13,000	Does not qualify as an adjustment to MAV. Individual year RMV is under $10,001 and cumulative RMV is under $25,001.
3	- $8,000	$5,000	Year 1 improvement was destroyed and is removed from the cumulative RMV.

Stat. Auth.: ORS 305.100
Stats. Implemented: ORS 308.149
Hist.: REV 8-1998, f. 11-13-98, cert. ef. 12-31-98; REV 8-2000, f. & cert. ef. 8-3-00

150-308.205-(C)

Derivation of Capital Structure and Discount Rates for Valuing Industrial Properties and Department-Assessed Properties

(1) CAPITAL STRUCTURE.

The capital structure of a company refers to the make-up of its financial structure, i.e., long-term debt and equity. For ad valorem appraisal purposes, the appropriate capital structure for a company is the typical capital structure for the industry group to which the property belongs based upon current market cost of debt and equity.

If it can be shown that use of an industry capital structure would not reflect the market value of the property because of the unique nature of the property or its operation, the current owner's capital structure may be used.

The procedures to be followed in determining capital structure are as follows:

(a) Select industry group, i.e., electric utility, airline, railroad, lumber, food processing, etc.

(b) Determine if it is necessary to have industry sub groups. Sub groups are groupings of properties within an industry type that have similar characteristics and that are different from other sub groups within the industry type. Sub groups have similar qualities such as bond ratings, degree of risk if unrated, business activities and size.

(c) For each group or sub group, a sufficient number of companies should be selected that have publicly traded securities and similar debt ratings (e.g., Moody's Aa, A, Baa, etc.). The company or companies whose property is subject to appraisal may be included as part of the data set.

(d) The appropriate capital structures shall be determined by a correlation of the capital structures of the companies in the selected group.

(e) Capital structures for companies with nonrated debt must be estimated from the best data available, such as balance sheets, public utility commission-approved structures, sales data, lenders' opinions, industry recommendations, or patterns established by companies with rated debt within the same industry.

(2) BASIC DISCOUNT RATE.

Basic discount rate, cost of capital, and capitalization rate are synonymous as used herein. The band-of-investment method is the preferred method for calculating basic discount rate. An example of this method, assuming a capital structure of 50 percent debt, 10 percent preferred stock, and 40 percent common equity, is shown below:

Band-of-Investment Method

Type	% of Capital Structure	Current Cost	Weighted Cost
Debt	50%	13.00%	6.500%
Preferred	10%	13.25%	1.325%
Common	40%	16.00%	6.400%
Basic Discount Rate as Calculated			14.225%

(a) The band-of-investment capitalization rate can readily be converted to an after-tax rate. The after-tax interest rate is substituted for the current cost of debt in the band-of-investment procedure. This after-tax cost of debt is calculated by multiplying the current cost of debt by one minus the corporate tax rate.

When the after-tax cost of capital is used, the tax expense of the prospective purchaser must be deducted from the income to be capitalized as though the property had no tax shelter from debt interest to avoid double counting the deduction for income taxes.

(b) *Cost of Debt*

The cost of debt is the current market rate for new securities. The embedded rate on securities previously issued is not a proper measure.

In order to determine the cost of debt the appraiser should:

(A) Refer to the rates for seasoned bond issues from Moody's Utility, Industrial, and Transportation weekly news reports or other rating services for at least two months immediately prior to the appraisal date. This should be done by bond rating (Aa, A, Baa, etc.) and industry type.

(B) Obtain information on new bond issues by industry type and bond rating from Moody's Bond Survey or other publications for at least two months immediately prior to the appraisal date.

(C) Consider recommendations on debt rates submitted by industry.

(D) Select rates for each industry group by bond rating after analyzing the data in the steps above.

(c) *Preferred Stock*

The cost of preferred stock is determined from the current market rates, not the embedded rate.

(d) *Cost of Equity*

The two preferred methods for determining the cost of equity capital are the Discounted Cash Flow (DCF) model and Capital Asset Pricing Model (CAPM). The appraiser should consider other models if circumstances and data justify their use.

(A) The DCF model, stated mathematically, is as follows:

$$K_e = \frac{D_1}{P_0} + g$$

K_e = The cost of equity capital

D_1 = The estimated annual dividend for the next period

P_0 = The current price of the common stock

g = The expected rate of growth

Information on the estimated annual dividend for the next period (year) and the expected rate of growth can be obtained from such financial publications as Value Line. The current price for the common stock is the average price near the appraisal date.

The DCF equity rate for the industry group is determined by correlating equity rates of return computed for the companies in the industry capital structure group.

(B) The CAPM, stated mathematically, is as follows:

$$K_e = R_f + B_i(R_p)$$

K_e = The entity's cost of equity

R_f = Risk free interest rate (30-year U.S. government bonds or notes)

R_m = Market or portfolio rate of return

B_i = Beta factor for the entity

R_p = Risk Premium = $(R_m - R_f)$

Information on the risk free rate (R_f) can be obtained from the Federal Reserve Bulletin containing rates for U.S. Treasury notes or bonds as near the appraisal date as possible. Data for Beta (B_i) and the market rate (R_m) shall be obtained from a reliable source such as Value Line. A single number for risk premium (R_p) such as those published by Ibbotson Associates, Kidder Peabody, and others may be used.

The CAPM equity rate for the industry group is determined by correlating equity rates of return computed for the companies in the industry capital structure group.

(3) EFFECTIVE DATE:

This rule first applies to property valuations as of January 1, 1990.

Stat. Auth.: ORS 305.100
Stats. Implemented: ORS 308.205
Hist.: RD 2-1990, f. & cert. ef. 3-15-90

150-308.205-(F)

Measuring Functional Obsolescence in Industrial Property

(1) The procedure for estimating functional obsolescence for industrial property in the reproduction cost approach is as follows:

(a) The total functional obsolescence equals:

(A) The physically depreciated reproduction cost of the property with a deficiency requiring a substitution or modernization, or a superadequacy, less

(B) The physically depreciated cost of the replacement property with a deficiency requiring a substitution or modernization, or a superadequacy, plus

(C) The cost to cure or the value of the loss (if less).

(b) For an industrial property with a deficiency requiring an addition follow the same steps as listed in subsection (1)(a), except step (A) equals zero.

(c) The result of (1)(a) equals the total functional obsolescence deduction in the reproduction cost approach attributable to the property with a deficiency or superadequacy.

(d) In specific situations, the procedure in subsection (1) can be simplified:

(A) For curable functional obsolescence caused by a deficiency requiring a substitution or modernization, or a superadequacy, functional obsolescence equals the physically depreciated reproduction cost of the property with a deficiency or superadequacy plus the excess cost to cure.

(B) For curable functional obsolescence caused by a deficiency requiring an addition, functional obsolescence equals the excess cost to cure.

(e) For purposes of measuring functional obsolescence, the property with a deficiency or superadequacy in subsection (1) of this rule can be the entire subject property or one or more portions of the property that are being analyzed for the existence of functional obsolescence. If the entire property has multiple deficiencies or superadequacies, multiple applications of the procedure in subsection (1) of this rule may be required to measure the total functional obsolescence.

(f) Some methods of measuring depreciation may capture more than just physical depreciation. The depreciation measured may include elements of functional and external obsolescence.

(A) If in subsection (1)(a)(A) an age-life method is used to estimate the total depreciation of the property with a deficiency or superadequacy, no additional functional obsolescence should be deducted from the depreciated reproduction cost of the individual assets.

(B) If in subsection (1)(a)(A) the selling price of used equipment is used to estimate the depreciation of the property with a deficiency or superadequacy, no additional functional obsolescence should be deducted from the depreciated reproduction cost of the individual assets.

(C) In situations where all functional obsolescence of individual assets is fully captured by the depreciation method used, there may be additional functional obsolescence due to the assemblage of the individual assets into the layout of the property. Functional obsolescence due to layout can be accurately measured using the procedures described in subsection (1) of this rule. However, care must be taken to avoid double counting the functional obsolescence.

(2) The deduction for functional obsolescence in the replacement cost approach equals the cost to cure or the value of the loss (if less).

(a) When using the procedure in subsection (1)(a) of this rule to estimate the deduction for functional obsolescence in the replacement cost approach, steps (A) and (B) must equal zero ($0).

(b) When using consistent estimates of reproduction and replacement cost new, physical depreciation, and functional and external obsolescence, the market value indicator from replacement cost approach must equal the market value indicator from the reproduction cost approach. (see example 3)

(3) Definitions:

(a) The reproduction cost approach is an appraisal method for estimating market value of the subject property. The formula for this method is:

Market Value equals the Reproduction Cost New less physical depreciation less functional obsolescence less external obsolescence.

(A) The reproduction cost new is the cost to construct a new replica of the subject property as of the appraisal date using the same materials, design, layout, quality of workmanship and embodying the deficiencies and superadequacies of the subject property.

(B) The appraisal approach where the appraiser estimates the depreciation based on the selling prices of used equipment is a reproduction cost approach when the used prices utilized in the appraisal are for pieces of equipment that are replicas of the subject equipment. The formula for this method is:

Market Value equals the Reproduction Cost New less the depreciation from used equipment prices less the functional and external obsolescence not captured in the used equipment prices.

(C) The appraisal approach where the appraiser estimates the depreciation using an age-life method is a reproduction cost approach when the starting point is the reproduction cost new. The formula for this method is: Market Value equals the Reproduction Cost New less the depreciation from an age-life analysis less the functional and external obsolescence not captured in the age-life analysis.

(b) The replacement cost approach is an appraisal method for estimating the market value of the subject property as of the appraisal date. The formula for this method is:

Market Value equals the Replacement Cost New less physical depreciation less the cost to cure (or the value of the loss, if less) less external obsolescence. The replacement cost new is the cost, as of the appraisal date, to construct a property having equivalent utility to the subject property but built with the most cost-effective materials, design, and layout. The most cost effective materials, design, and layout is that combination of investment (cash out-flows) and the present value of anticipated after tax net income (cash in-flows) that produces the highest net present value.

(c) Functional Obsolescence is a loss in market value of a subject property when there is a reasonable feasibility of a typical prospective purchaser acquiring, without undue delay, a replacement property possessing an equivalent utility but is more cost-effective in terms of design, materials, or equipment. Functional obsolescence exists only by a comparison between the subject and the replacement property. There is no loss in value due to functional obsolescence unless the physically depreciated reproduction cost of the subject property minus the physically depreciated replacement cost of the replacement property plus the cost to cure (or value of the loss, if less) is greater than zero.

(A) Functional obsolescence due to a deficiency requiring a substitution or modernization is caused by an asset present in the subject property that is substandard compared to the replacement property.

(B) Functional obsolescence due to a deficiency requiring an addition is caused by a component that is missing from the subject property that is present in the replacement property

(C) Functional obsolescence due to a superadequacy is caused by an asset present in the subject property that is not present in the replacement property and does not contribute to value an amount equal to its cost.

(d) The physically depreciated reproduction cost of the property with a deficiency or superadequacy is the cost, as of the appraisal date, to construct a new replica of that property using the same materials, design, layout, quality of workmanship and embodying the deficiencies and superadequacies of that property less the amount of physical depreciation due to physical deterioration associated with wear and tear, the impact of the elements, and aging.

(e) The physically depreciated cost of the replacement property is the cost, as of the appraisal date, to construct a new property with the equivalent utility to the property with the deficiency or superadequacy using the most cost effective materials, design, and layout less the appropriate physical depreciation.

(A) For curable functional obsolescence, the appropriate percent of physical depreciation for the replacement property in subsection (1)(a)(B) is equal to the percent of physical depreciation of the replacement property included in the cost to cure in subsection (1)(a)(C) and (3)(h)(A). For example, if curable functional obsolescence is cured by purchasing and installing a new machine, the replacement property is also new (zero depreciation). (See example 3) However, if curable functional obsolescence is

cured by purchasing and installing a used machine that is 70% physically depreciated, the replacement property also must be 70% depreciated. (See example 4)

(B) For incurable functional obsolescence, the appropriate percentage of physical depreciation for the replacement property in subsection (1)(a)(B) is the same percentage of physical depreciation as the percentage of physical depreciation of the property with a deficiency or superadequacy, as it exists in the uncured condition.

(f) Functional obsolescence is incurable if the cost to cure is greater than the value of the loss.

(g) Functional obsolescence is curable if the cost to cure is less than the value of the loss.

(A) To be considered curable, it must be physically possible, legally permissible, and financially feasible to cure the functional obsolescence.

(B) If curing functional obsolescence is required to allow the existing assets to continue to function at their highest and best use and the requirements of subsection (3)(g)(A) are met, the obsolescence is curable even if the cost to cure is greater than the value of the loss. (See Example 6)

(h) The cost to cure equals the net cash out-flow anticipated to be necessary to eliminate the deficiency or superadequacy. This equals:

(A) The physically depreciated replacement cost of the replacement property, plus

(B) The retrofitting cost associated with installing the replacement property in the subject property, plus

(C) The cost to remove the property with a deficiency or superadequacy , less

(D) The salvage value of the property with a deficiency or superadequacy.

(i) The excess cost to cure recognizes that installing an asset in an existing property may cost more than installing the same asset when a property is constructed new on the appraisal date. The excess cost to cure equals:

(A) The retrofitting cost associated with installing the replacement property in the subject property, plus

(B) The cost to remove the property with a deficiency or superadequacy, less

(C) The salvage value of the property with a deficiency or superadequacy.

(j) Retrofitting cost is the cost as of the appraisal date to install an asset in the subject property less the cost as of the appraisal date to install the same asset as part of new construction.

(k) The value of the loss equals the present value of the after-tax loss in anticipated income from the continuing operation of the property with a deficiency or superadequacy compared to the projected operation of the replacement property. For industrial plants, this loss in income is often the result of excess operating costs due to inefficiencies in the subject plant compared to the subject property when cured of the functional obsolescence. The present value includes factors for the time period that the plant will continue to incur the loss in income and an appropriate discount rate. See OAR 150-308.205-(C) for the appropriate method of calculating the discount rate.

(4) Examples (Assume zero external obsolescence for all examples):

(a) *Example 1*: An example of incurable functional obsolescence due to a deficiency requiring a substitution or modernization.

A manufacturing plant has a boiler that produces process steam. This boiler produces steam inefficiently by current standards. A new replacement boiler with a 20 year life is available that would produce the same amount of steam and save $37,000 per year in fuel costs. The existing boiler had a 20 year expected life when it was new and has a remaining life of 10 years. The reproduction cost new as of the appraisal date of the subject boiler is $500,000. The cost new as of the appraisal date of the more efficient replacement boiler is $700,000 if installed during new construction. The cost to retrofit the new boiler in the existing plant as of the appraisal date, including the cost to remove the existing boiler and purchase and install the new boiler is $750,000. There is no salvage value for the existing boiler.
This indicates an excess cost to cure of $50,000.
The value of the loss equals $136,410 which is the present value of the excess fuel costs capitalized at 10% for 10 years with a tax rate of 40%.

The calculation of functional obsolescence:

(A) Estimate the physically depreciated reproduction cost of the property with a deficiency

Reproduction cost new of the subject boiler as of the appraisal date $500,000

Less physical depreciation of the subject boiler (50% X $500,000)		- 250,000
Equals the depreciated reproduction cost of the subject boiler		$250,000

(B) Less, the physically depreciated cost of the replacement property for property with a deficiency

Replacement cost new of the replacement boiler as of the appraisal date		$700,000
Less physical depreciation of the replacement boiler (50% X $700,000)		-350,000
Equals the physically depreciated cost of the replacement property		$350,000
(C) Plus, the lesser of the cost to cure or the value of the loss		
The cost to cure	$750,000	
Or the value of the loss, if less	$136,410	+$136,410

Functional obsolescence in the reproduction cost approach equals $250,000 - $350,000 + $136,410 = $36,410

The market value indicator for the existing boiler from the reproduction cost approach is:
Market Value = Reproduction cost new less physical depreciation less functional obsolescence
Market Value = $500,000 – $250,000 – $36,410 = $213,590

(b) *Example 2*. An example of incurable functional obsolescence due to a superadequacy.

An industrial building has a 40-foot eave height. The market standard for the highest and best use of this kind of building is an eave height of 32 feet. The building has an effective age of 25 years and an estimated remaining life of 15 years. The reproduction cost new of the subject building is $400,000 as of the appraisal date. The cost new of the replacement building with a 32-foot eave height is $320,000 as of the appraisal date. The excess height of the subject building results in an additional $6,600 per year for heat compared to the cost to heat the replacement building.

The value of the loss is $30,120, which is the present value of the excess heating costs capitalized at 10% for 15 years with a tax rate of 40%. Preliminary estimates of the cost to cure indicate that the cost would far exceed the value of the loss of $30,120.

The calculation of functional obsolescence:

(A) Estimate the depreciated reproduction cost of the property with a superadequacy		
Reproduction cost new of the subject building as of the appraisal date		$400,000
Less physical depreciation of the subject building ($400,000 X 62.5%)		- 250,000
Equals the depreciated reproduction cost of the subject building		$150,000
(B) Less, the physically depreciated cost of the replacement property		
Replacement cost new of the replacement building as of the appraisal date		$320,000
Less physical depreciation of the replacement building ($320,000 X 62.5%)		-200,000
Equals the physically depreciated cost of the replacement building		$120,000
(C) Plus, the lesser of the cost to cure or the value of the loss		
The cost to cure	greater than $30,120	
Or the value of the loss, if less	$ 30,120	+ 30,120

Functional obsolescence equals $150,000 - $120,000 + $30,120 = $60,120.

The market value indicator for the existing building from the reproduction cost approach is:
Market Value = Reproduction cost new less physical depreciation less functional obsolescence
Market Value = $400,000 – $250,000 – $60,120 = $89,880

(c) *Example 3*: An example of curable functional obsolescence due to a deficiency requiring and addition.

A sawmill lacks an automatic lumber sorter. As of the appraisal date, the lumber is sorted using a manual sorter. By installing an automatic sorter the mill would reduce the labor cost by $263,000 per year. As of the appraisal date, the sawmill, excluding the manual sorting equipment, has a reproduction cost new of $8,000,000 and is 50% physically depreciated. The existing manual sorting equipment has a reproduction cost new of $40,000 and is 75% depreciated. The cost new of a replacement automatic sorter as installed on the appraisal date during the construction of a new mill is $1,000,000. The cost to cure including the cost of purchasing the new replacement sorter, installing it in the subject mill, removing the existing manual sorting equipment less the salvage value of the existing manual sorting

equipment is $1,100,000. This indicates an excess cost to cure of $100,000. The subject sawmill has an estimated remaining life of 15 years.

The value of the loss is $1,200,000, which is the present value of the excess operating cost capitalized at 10% for 15 years with a tax rate of 40%.

The calculation of functional obsolescence:

In subsection (1)(d)(A), a simplified formula for calculating functional obsolescence is identified. That formula applies in this situation, curable functional obsolescence caused by a deficiency requiring a substitution or modernization. The formula is:

Functional obsolescence = physically depreciated reproduction cost of the property with a defect plus the excess cost to cure.

Functional obsolescence = $10,000 + $100,000 = $110,000.

The market value indicator for the subject sawmill from the reproduction cost approach is:

Market Value = Reproduction cost new less physical depreciation less functional obsolescence

Reproduction Cost New		
Sawmill without sorter		= $8,000,000
Manual Sorter		$ 40,000
Total Reproduction Cost New		$ 8,040,000
Physical Depreciation		
Sawmill without sorter	$ 8,000,000 X 50%	= $4,000,000
Manual Sorter	$ 40,000 X 75%	$ 30,000
Total Physical Depreciation		$ 4,030,000
Market Value (total mill)	= $8,040,000 - $4,030,000 - $110,000	= $3,900,000

The market value indicator for the subject property from the replacement cost approach is:

Market Value = Replacement cost new less physical depreciation less cost to cure (or value of the loss, if less)

Replacement Cost New		
Sawmill without sorter		= $8,000,000
Replacement (Automatic) Sorter		$ 1,000,000
Total Replacement Cost New		$ 9,000,000
Physical Depreciation		
Sawmill without sorter	$ 8,000,000 X 50%	= $4,000,000
Replacement (Automatic) Sorter	$ 1,000,000 X 0%	$ 0
Total Physical Depreciation		$ 4,000,000
The Cost to Cure (or Value of the Loss, if less)		$1,100,000
Market Value (Total Mill)	= $ 9,000,000 - $4,000,000 - $1,100,000	= $3,900,000

(d) *Example 4*: An example of curable functional obsolescence due to a deficiency requiring a substitution.

This example is identical to Example 3 except the functional obsolescence is cured by installing a used machine.

A used automatic sorter can be purchased that would make this mill as efficient as the replacement mill. The cost of the used automatic sorter as installed during the construction of a new mill is $700,000. The used automatic sorter has a remaining life of 15 years. The cost to cure including the cost of purchasing the sorter, installing it in the subject mill, removing the existing manual sorting equipment less the salvage value of the existing manual sorting equipment is $800,000. This indicates an excess cost to cure of $100,000.

The calculation of functional obsolescence:

(A) Estimate the depreciated reproduction cost of the property with a deficiency requiring a substitution

Reproduction cost new of the existing manual sorter	$ 40,000
Less physical depreciation of the existing manual sorter	- $ 30,000
Equals the depreciated reproduction cost of the existing manual sorter	$ 10,000

(B) Less, the physically depreciated cost of the replacement property for the property with a deficiency requiring a substitution

Replacement cost new of the automatic sorter		$1,000,000
Less physical depreciation of the automatic sorter (from used market)		$ -300,000
Equals the depreciated replacement cost of the automatic sorter		$ 700,000
(C) Plus, the lesser of the cost to cure or the value of the Loss		
The cost to cure	$800,000	$800,000
Or the value of the loss, if less	$1,200,000	

Functional obsolescence equals $10,000 - $700,000 + $800,000 = $110,000

The market value indicator for the subject sawmill from the reproduction cost approach is:

Market Value = Reproduction cost new less physical depreciation less functional obsolescence

Reproduction Cost New		
Sawmill without sorter		= $8,000,000
Manual Sorter		$ 40,000
Total Reproduction Cost New		$ 8,040,000
Physical Depreciation		
Sawmill without sorter	$ 8,000,000 X 50%	= $4,000,000
Manual Sorter	$ 40,000 X 75%	$ 30,000
Total Physical Depreciation		$ 4,030,000
Market Value (total mill)	= $8,040,000 - $4,030,000 - $110,000	= $3,900,000

The market value indicator for the existing building from the replacement cost approach is:

Market Value = Replacement cost new less physical depreciation less cost to cure (or value of the loss, if less)

Replacement Cost New		
Sawmill without sorter		= $8,000,000
Replacement (Automatic) Sorter		$ 1,000,000
Total Reproduction Cost New		$ 9,000,000
Physical Depreciation		
Sawmill without sorter	$ 8,000,000 X 50%	= $4,000,000
Replacement (Automatic) Sorter	$ 1,000,000 X 30%	$300,000
Total Physical Depreciation		$ 4,300,000
Market Value (Total Mill)	= $ 9,000,000 - $4,300,000 - $800,000	= $3,900,000

(e) *Example 5*: An example of a deficiency in the subject plant that does not indicate the presence of functional obsolescence.

A food processing plant lacks sufficient on-site cold storage. As a result the plant is required to rent storage space in an off-site cold-storage facility. Consequently, the plant has additional expenses for transporting products between the processing plant and the off-site cold-storage facility. The plant would save $150,000 per year in transportation costs. If the plant had sufficient on-site cold-storage space, the plant would save an additional $350,000 per year due to the difference between renting space ($450,000 per year) and operating an on-site cold-storage facility ($100,000 per year). The plant is expected to operate for 25 years from the date of the appraisal and the plant will continue to require cold-storage space as long as it operates. The plant site has sufficient land to construct an on-site cold-storage space. The estimated new cost to construct the on-site cold-storage space as of the appraisal date is $3,000,000. This is the same as the cost to construct the cold-storage space during new construction. Therefore, the excess cost to cure equals zero.

The value of the loss equals $2,723,110 which is the present value of the $500,000 annual excess costs capitalized at 10% for 25 years with a tax rate of 40%.

The calculation of functional obsolescence:

(A) Estimate the depreciated reproduction cost of the property with a deficiency requiring an addition No cold-storage facility is included in the reproduction cost approach. This step equals $0.

(B) Less, the depreciated cost of the replacement property

Replacement cost new of the replacement cold-storage space	$3,000,000

Less physical depreciation of the replacement cold-storage space		- 0
Equals the depreciated cost of the replacement cold-storage space		$3,000,000
(C) Plus, the lesser of the cost to cure or the value of the loss		
The cost to cure, or	$3,000,000	
The value of the loss, if less	$2,723,110	$ 2,723,110

Functional obsolescence in the reproduction cost approach equals $0 - $3,000,000 + $2,723,110 = -$276,890. The calculation of functional obsolescence yields a negative number. This is an indication that the investment in on-site cold-storage space is not financially justified. The plant is better off spending the annual costs associated with off-site storage rather than investing in a $3,000,000 storage facility. Since the number is less than or equal to zero, there is no functional obsolescence due to the lack of cold-storage space at this plant. No adjustment for functional obsolescence should be made to the depreciated reproduction cost of the subject property.

(f) *Example 6*: An example of curable functional obsolescence due to a deficiency requiring an addition.

A manufacturing plant lacks the necessary pollution control equipment to clean the water discharged from the plant. The government agency responsible for overseeing the enforcement of environmental law is requiring the plant to install this equipment or face legal action. All other plants in this industry are required to meet the same discharge standards required of this plant. The company has developed a plan to retrofit this equipment in the plant. This functional obsolescence is considered curable because the plant will not be able to continue to operate without the new pollution control equipment. The cost to cure is $600,000 which includes $100,000 retrofit cost. This equipment when installed during new construction as of the appraisal date is $500,000.

The calculation of functional obsolescence using the simplified formula in subsection (1)(d)(B) of this rule:

Functional obsolescence equals the Excess Cost to Cure.

The excess cost to cure is the cost to cure ($600,000) less the cost to install the replacement equipment during new construction ($500,000). The functional obsolescence in the reproduction cost approach equals $100,000.

Stat. Auth.: ORS 305.100
Stats. Implemented: ORS 308.205
Hist.: REV 6-2001, f. & cert. ef. 12-31-01

150-308.215(1)-(A)
Real Market Value and Property Classification as Part of Assessment Roll

(1) In addition to the assessed value of property, the assessment roll must show:
(a) The real market value (RMV) of the land, excluding all buildings, structures, and improvements thereon;
(b) The RMV of all buildings, structures, and improvements; and
(c) The total RMV for each parcel of real property not required to be assessed as a unit.
(d) For properties subject to ORS Chapter 100, for example, condominiums and time shares that are required to be assessed as a unit, the assessment roll must show the RMV as well as the assessed value of each unit.
(2) The assessment roll must include the property classification code number for each parcel of real property in the county, except for those properties assessed by the department under ORS 308.505 to 308.605. The assessor must classify and assign a property classification code number to each parcel as provided in section (8) of this rule.
(3) The assessor must maintain the proper classification on each parcel of property.
(4) A county must separately identify and adjust land and improvement values for each property class for each market area to bring real property to RMV.
These adjustments to value must be developed from market studies or by any other method approved by the department as provided under ORS 309.200.
(5) The class code numbers that this rule establishes must be used for computing the real property class

ratios required by ORS 309.200.
(6) An assessor must obtain written approval from the Department of Revenue before deviating from the basic property classes defined in section (8) of this rule.
(7)(a) All classification must be based upon highest and best use of the property. The term "highest and best use" is defined in OARs 150-308.205-(A) and 150-308.205-(D). The class associated with the property may or may not be its current use.
(b) Unique properties can be classified under the "miscellaneous" category in section (8). The "miscellaneous" category can also be used for property requiring a separate trend.
(c) The property classification system must not be used to categorize market data that is more accurately described by other characteristics, such as the quality class of the improvements, market areas, or neighborhoods.
(d) The property class for mixed-use or transitional properties will be assigned based upon the use that contributes the most to the real market value on the current assessment date.
(A) A mixed-use property is one in which different parts of the property are used differently, such as a commercial use on one part, and a residential use on another part.
(B) A transitional use property is one in which the real market value on the current assessment date, at its current highest and best use, is being influenced in the market by an anticipated change in future use, such as residential property that is likely to sell for a commercial use in the future, but is not in commercial use on the assessment date.

(8) DEFINITIONS FOR PROPERTY CLASSIFICATION SYSTEM.

BASIC PROPERTY CLASSES

First Digit	Second Digit	Third Digit
0-Miscellaneous	0-No Significance	0-Vacant
1-Residential	1-Residential zone	1-Improved
2-Commercial	2-Commercial zone	2-Condominium
3-Industrial	3-Industrial zone	3-State responsibility
4-Tract	4-Unzoned farmland	4-Partially exempt
5-Farm	5-Exclusive Farm Use (EFU)	5-Taxable leased
6-Forest	6- Small Tract Forestland (STF)	6-Waterfront
7-Multi-family	7-Permanent Farm-Use (Disqualified due to ORS 215.236)	7-Mobile home parks
8-Recreation	8-Multiple special	8- (Left blank)
9-Exempt	9-Potential development	9-Manufactured Structure

1-0-0 Residential land only is an unimproved property that has residential use as its highest and best use, and the primary zoning is residential.
1-0-1 Residential property is an improved property that has residential use as its highest and best use.

2-0-0 Commercial land only is an unimproved property that has commercial use as its highest and best use, and the primary zoning is commercial.
2-0-1 Commercial property is an improved property that has commercial use as its highest and best use. This highest and best use is as income-producing property. Examples of commercial property include, but are not limited to: retail stores, supermarkets, discount stores, department stores, convenience marts, financial institutions, office buildings, small retail laundries, dry cleaners, medical and dental office buildings, recreational vehicle parks, hospitals, restaurants, theaters, automobile service stations and truck stops, automotive service centers, parking garages, car dealerships, hotels, and motels.
3-0-0 Industrial land only is an unimproved property that has industrial use as its highest and best use, and the primary zoning is industrial.
3-0-1 Industrial property is an improved property that has industrial use as its highest and best use. Industrial property includes, but is not limited to, those properties described by ORS 306.126, OAR 150-306.126(1) and ORS 308.408. Industrial property is typically located in an industrial zone, but may be located in areas with other types of zoning, for example, if it is a pre-existing or conditional use. Property-use characteristics typically include assembly, processing or manufacturing products from raw materials or fabricated parts and includes factories that render service, for example, large non-retail laundries and dry cleaners. Examples of industrial property include, but are not limited to, steel plants, foundries, chemical plants, and assembly plants; saw mills, plywood plants, and wood pulp or paper mills; high technology facilities, research and development facilities, science parks, and light and heavy manufacturing facilities; storage and distribution warehouses; natural resource processing and refining facilities such as natural gas wells and rock quarries. Classification of property as industrial is a separate determination from appraisal responsibility. Department or county responsibility for appraising industrial property is described in OAR 150-306.126(1).
4-0-0 Tract land only is parcels of varying sizes of unimproved acreage where the highest and best use is for development to a suburban or rural homesite, but the land is not divided into urban-type lots.
4-0-1 Tract property is parcels of varying sizes of improved acreage where the highest and best use is for a suburban or rural homesite, but the land is not divided into urban-type lots.
5-0-0 Farm and range land is vacant land where the highest and best use is for the production of agricultural crops, feeding or management of livestock, or any other agricultural use, and the land is not specially assessed for farm use.
5-0-1 Farm and range property is land improved with buildings where the highest and best use is for the production of agricultural crops, feeding or management of livestock, or any other agricultural use, and the land is not specially assessed for farm use.
5-4-0 Non-EFU zone farm and range land is vacant land that is under special farm-use assessment by application.
5-4-1 Non-EFU zone farm and range property is land improved with buildings that is under special farm-use assessment by application.
5-5-0 EFU zoned farm and range land is vacant land that is under special farm-use assessment by zoning.
5-5-1 EFU zoned farm and range property is land improved with buildings that is under special farm- use assessment by zoning.
6-0-0 Forestland is vacant land with a highest and best use for growing and harvesting trees of a marketable species.
6-0-1 Forest property is land improved with buildings with a highest and best use for growing and harvesting trees of a marketable species.
6-4-0 Forestland is vacant land for which the highest and best use is one other than growing and harvesting of trees of a marketable species but the land has been designated as forestland by application.
6-4-1 Forest property is land improved with buildings for which the highest and best use is something other than growing and harvesting trees of a marketable species but the land has been designated as forestland by application.
6-6-0 Small Tract Forestland property is vacant land that is under special forestland assessment as Small Tract Forestland by application.
6-6-1 Small Tract Forestland property is land improved with buildings that is under special forestland assessment as Small Tract Forestland by application.

7-0-0 Multi-family land is unimproved land that has multiple housing (five or more living units) as its highest and best use, and the primary zoning is multi-family.
7-0-1 Multi-family property is an improved property that has multiple housing (five or more living units) as its highest and best use. Multi-family property includes property developed as a manufactured housing park.
8-0-0 Recreation land is unimproved land that has recreational use as its highest and best use.
8-0-1 Recreation property is an improved property that provides recreational opportunity as its highest and best use.
Use of Second Digit
0 - Indicates highest and best use and zoning are the same.
1, 2, 3 - Indicates highest and best use and zoning are nonconforming. Example: A property has an improved residence and its highest and best use is for residential use, but it is located in a commercial zone. The property class would be 1-2-1.
4, 5 - Indicates special assessment for farm-use and forest-use lands.
6 - Indicates special assessment for Small Tract Forestland.
7 - Indicates property permanently disqualified from farm or forestland use due to ORS 215.236 (non-farm dwelling).
8 - Indicates property carries more than one special assessment, for example, combination of farm-use and designated forestland or other combination of special assessments; or indicates government-restricted multi-unit rental housing that is specially assessed under ORS 308.701 – ORS 308.724.
9 - Indicates property has potential for further development, for example, it has been subdivided or it is sub-dividable.
Miscellaneous Property: Class 0-0-0
The first digit denotes the major class: Miscellaneous Property.
The second digit indicates the basic class to which the property relates:
0-0 Miscellaneous Property
0-1 Miscellaneous Residential
0-2 Miscellaneous Commercial
0-3 Miscellaneous Industrial
0-4 Miscellaneous Tract
0-5 Miscellaneous Farm
0-6 Miscellaneous Forest
0-7 Miscellaneous Multi-family
0-8 Miscellaneous Recreational
0-9 Miscellaneous Exempt
The third digit is unique to the class:
0- Unbuildable size, Department of Environmental Quality, easement or right-of-way
1- Improvement only
2- Mineral interest
3- Centrally assessed
4- Historic
5- Open space
6- (Left blank)
7- Timeshare property
8- Enterprise zone
9- Manufactured structure
0-0-9 Real property manufactured structure
0-1-9 Personal property manufactured structure
Exempt Property: Class 9-0-0
The first digit defines the property as exempt.
The second digit identifies the type of property or ownership:
9-0 Student housing
9-1 Church

9-2 School
9-3 Cemetery
9-4 City
9-5 County
9-6 State-owned
9-7 Federally owned
9-8 Benevolent, fraternal ownership
9-9 Port properties or other municipal properties
The third digit is unique to this class and acts as an additional identifier:
0- Vacant
1- Improved
2- Partially exempt
3- Taxable leased property
4- In lieu of value
5- Temporarily exempt
6- Native American holdings
7- (Left blank)
8- Mineral interest
9- Manufactured structure
Examples:
9-0-1 OSU student housing
9-1-2 Church property with for-profit bookstore
(9) Starting with the 2006-07 tax year, each assessor must prepare an annual plan that outlines how the county will comply with the provisions of this rule no later than the January 1, 2009 assessment date. The plan must be submitted as part of the sales ratio study and accompanying appraisal plan submitted under ORS 309.200 and 309.203. The plan must address how the county complies with, or intends to comply with the provisions of this rule for the initial tax year and all subsequent tax years up to the 2009-2010 tax year.
Stat. Auth.: ORS 305.100, 308.215
Stats. Implemented: ORS 308.215
Hist: Eff. 3/70, Amended 9/71, 11/73, 1/1/77, 12/78, 12/31/79, 12/31/84, 12/31/87, 12/31/89, 12/31/91, 12/31/93; Amended and Renumbered from OAR 150-308.215(1) to OAR 150-308.215(1)-(A), 12/31/94; Amended 12/31/95, 12/31/97, 12/31/00, 6/30/02, 6/30/05, 7/31/2006.

150-308.219

Printout or Microfiche Required When Assessment and Tax Rolls do not Constitute a Written Record

All information specified in the laws and administrative rules relating to the assessment roll, the tax roll and the June 30 Tax Collector's Report must be on the printouts or microfiche. The information required on these printouts or microfiche is specified below.

(1) The tax roll must reflect the assessments as of September 25 and show all corrections, changes, and additions made to the data in the computer occurring between September 25 and the date the roll is delivered to the tax collector. In addition to the information specified under ORS 308.215 for the assessment roll, printouts or microfiche must contain the following information.

(a) Tax year

(b) County

(c) Mailing address for the tax statement

(d) Building class

(e) Manufactured structure "X" plate number or HUD identification number

(f) All current year taxes extended

(g) All delinquent taxes as specified in ORS 311.125

(2) The June 30 Tax Collector's Report must be prepared by July 15 and include all changes, corrections, and additions made to the roll since the preceding June 30 Tax Collector's Report. The report must include all unpaid accounts. This includes all changes from the roll and all effects on tax monies on each account.

(3) The printouts referred to in ORS 308.219 are specifically the assessment roll, tax roll, and the June 30 Tax Collector's Report. Any other listings used are supplemental documents and not part of the required rolls, microfiche or report printouts.

[**Publications:** The publication(s) referred to or incorporated by reference in this rule is available from the Department of Revenue pursuant to ORS 183.360(2) and ORS 183.355(6).]

Stat. Auth.: ORS 305.100
Stats. Implemented: ORS 308.219
Hist.: RD 10-1985, f. 12-26-85, cert. ef. 12-31-85; RD 8-1991, f. 12-30-91, cert. ef. 12-31-91; REV 6-2003, f. & cert. ef. 12-31-03

150-308.550(2)-(A)

Allocation of Mobile Aircraft Property Value

(1) The percent of the unit value of the mobile aircraft property of air transportation and air express companies assessed by the department pursuant to ORS 308.515 allocated to Oregon shall be determined by the following formula:

Percent of unit value to be allocated is the sum of:

		Oregon Ground and Flight Time*
40%	x	Total Ground and Flight Time Everywhere
		Oregon Departures Equated
50%	x	Departures Everywhere Equated
		Tons Enplaned and Deplaned in Oregon
10%	x	Tons Enplaned and Deplaned Everywhere

*Time shall be measured by equated plane hours.

(2) Definitions:

(a) Ground time is the amount of time between the moment an aircraft comes to rest from one flight until it first moves under its own power for purposes of another flight.

(b) Flight time is the amount of time between the moment an aircraft first moves under its own power for the purposes of flight until it comes to rest at the next point of landing. Oregon flight time is the product of the total flight time of a flight originating or terminating in Oregon multiplied by the Oregon percentage of the airport-to-airport distance of the flight.

(c) A departure occurs each time an aircraft takes off from one airport for purposes of flight to another airport.

(d) Tons enplaned and deplaned are the total number of tons (passengers and cargo) loaded on and unloaded from company aircraft. Passengers and cargo entering a carrier's system on interchange flights are considered as enplaning or deplaning at the interchange point.

(e) Equated plane hours are calculated by multiplying the actual plane hours of an aircraft type by the ratio of the average value of that aircraft type to the base value. The base value is defined as the average value of one designated aircraft type for each air transportation company.

(f) Equated departures are calculated by multiplying the actual number of departures for an aircraft type by the ratio of the average value of that aircraft type to the base value.

(3) If, for a particular company, reliable data for all three factors in the formula are not available, the department shall determine the factors, for which the company provided inadequate data according to the best of its information and belief.

Stat. Auth.: ORS 305.100

Stats. Implemented: ORS 308.550

Hist.: RD 2-1987(Temp), f. & cert. ef. 4-3-87; RD 7-1987, f. & cert. ef. 6-5-87; RD 9-1989, f. 12-18-89, cert. ef. 12-31-89, Renumbered from 150-308.550(2); RD 5-1990, f. 11-15-90, cert. ef. 12-1-90