

Approved February 2, 1987  
Date

MINUTES OF THE Senate COMMITTEE ON Assessment and Taxation

The meeting was called to order by Senator Fred A. Kerr at  
Chairperson

11:00 a.m./~~p.m.~~ on January 29, 1987 in room 519-S of the Capitol.

All members were present except:

Committee staff present:

Tom Severn, Research  
Chris Courtwright, Research  
Don Hayward, Revisor's Office  
Sue Pettet, Secretary to the Committee

Conferees appearing before the committee:

Ron Smith, Kansas Bar Association  
Senator Karr  
Senator Johnston  
Jim Yonally, NFIB of Kansas  
Evora Wheeler, Emporia Chamber of Commerce  
Jan Ralston, Emporia Chamber of Commerce  
Jerry Jones, Emporia Travel & Tourism  
Secretary Harley Duncan, Department of Revenue  
David Litwin, Ks. Chamber of Commerce

Chairman Kerr called the meeting to order and introduced Ron Smith, KBA.

Mr. Smith was present to request three bill introductions. The first request is "concerning tolling of interest on administrative tax appeals." Senator Burke moved that the bill be introduced. Senator Mulich seconded. Motion carried.

Mr. Smith's second request for bill introduction concerns "an act concerning sales tax penalty provision." Senator Mulich moved that the bill be introduced. Senator Thiessen seconded. Motion carried.

Mr. Smith requested bill introduction concerning "tax compromises of Civil Liabilities." Senator Mulich moved that the bill be introduced. Senator Frey seconded. Motion carried.

Senate Bill 5

Senator Johnston, one of the sponsors of the bill, testified in favor of it. He explained it is a proposal amending the Kansas withholding and declaration of estimated tax provisions. Its intent is to provide that the "extras" used in movies would not be required to have withholding tax deducted from their pay. The bill speaks to only withholding, not tax liability.

Evora Wheeler testified in favor of S.B. 5. (Attachment 1) She said that the economy of the Lyon County area was greatly benefited by the filming of the movie "Broken Commandments" in late 1986. She said that according to records of expenditures there was a minimum of \$1,223,237 paid to businesses and individuals in the area and that there was at least \$86,000 spent in other cities as a result of the filming.

She said that a significant problem developed when it appeared that reporting **and** payment of unemployment and withholding taxes on "extras" was going to be required. She said that one business person with the movie company had said that nothing like this had happened to them in any of the other 30 states which he had worked. She explained that these extras usually only work one or two days; are paid approximately \$35,00 a day, and can range in number from 500 to 2,000. She noted that the county expense can be exorbitant for the movie company. She said the extras are usually paid in cash.

Jan Ralston testified in support of Senate Bill 5. (Attachment 2)

CONTINUATION SHEET

MINUTES OF THE Senate COMMITTEE ON Assessment and Taxation,  
room 519-S, Statehouse, at 11:00 a.m./~~a.m.~~<sup>p.m.</sup> on January 29, 1987

Jerry Jones testified in support of S.B. 5.

Jim Yonally testified in support of S.B. 5. He stated that he and his son had been a part of "The Day After" and "Broken Commandments" and that he realized the tremendous financial boost and possibilities that film-making has in Kansas.

Secretary Harley Duncan commented that he felt that the whole temporary labor system in general should have some serious consideration.

Senate Bill 43

Senator Thiessen, one sponsor of the bill, testified in support of it. Provisions of the bill would require that the Director of Property Valuation modify the methods that the division can currently use to value personal property with the use of trending factors.

Dave Litwin provided testimony in support of S.B. 43. He noted that some parts of the bill would be obsolete on January 1, 1989, but others would not.

Secretary Harley Duncan provided testimony (See Attachment 3) to review the trending factor issue. He noted that the Division feels that they have complied with the intent of the provisions of this bill. This is a mass appraisal approach and with any mass appraisal there are going to be some problems. Since the introduction of the 1985 trending factors, the Division has received very few complaints from either taxpayers or county appraisers about trended values.

Senator Allen moved that the minutes of the January 28, 1987 meeting be approved and Senator Thiessen seconded. Motion carried.

Meeting adjourned.



TESTIMONY  
TO THE  
ASSESSMENT AND TAXATION COMMITTEE  
IN REGARD TO  
PROPOSED SENATE BILL 5

PRESENTED BY  
EVORA A. WHEELER  
811 HOMEWOOD  
EMPORIA, KANSAS

BACKGROUND: My experience includes sixteen and one-half years as a staff member of the Emporia Chamber of Commerce, with interest and experience in the economic development of the area and the entire state of Kansas. Most recent experience was in the auditors' office of Clandon Productions, a company engaged in the making of the movie "Broken Commandments" in Emporia, Kansas.

ECONOMIC IMPACT OF MOVIE ON EMPORIA/KANSAS:

According to records of expenditures, there was a minimum\* of \$1,223,237 paid to businesses and individuals in Lyon County during the period of October 20 through December 30, 1986. These expenditures were for: use of properties; services (such as welding, printing, painting, art, autobody repair, photography, child care, signs, cleaning, security, carpenters, nursing, etc.) supplies/equipment (stage set, repairs, office, replacement, etc.); City/County services; food, flowers, music; furniture and auto rentals; lodging; medical care; legal services; communication equipment; fuel; payroll of regular employees (secretarial, drivers, helpers); "extras"; miscellaneous and petty cash expenditures.

\*I use "minimum" because there were some bills received, and paid, by the company after it returned to California. However, I feel these figures provide ample information about the economic impact of movie-making on the Kansas economy; particularly when multiplied by the "5" factor.

There was an additional \$86,000 spent in the cities of Lawrence, Topeka, Council Grove, Madison and Wichita.

PROBLEM: Unlike approximately thirty other states in which one of the auditors has been involved in movie-making, Kansas laws require the reporting and payment of unemployment and withholding taxes on "extras," or "casual" or "temporary" labor as it is referred to in some states. Since "extras" usually are engaged for only one or two days, and may number 500 to 2,000, depending on the movie, it would be an exorbitant additional expense for the company just in the area of paper work.

RECOMMENDATION: I strongly encourage the members of this Committee to support SB 5, which makes allowances for the exemption of withholding taxes and/or reporting taxes on persons employed as "extras" in the making of movies. This

legislative action would enhance the efforts of the Kansas Film Commission to attract other movie companies to produce their movies in Kansas. As with attracting any type of industry to our state, we MUST be willing to make some concessions in order to attain an image that we really do want to attract business to Kansas.

Presentation on January 29, 1987.

January 29, 1987

TESTIMONY IN SUPPORT OF SENATE BILL NO. 5

Good morning, Mr. Chairman and members of the committee. My name is Jan Ralston. I am the director of the Emporia/Lyon County Convention and Visitors Bureau, a division of the Emporia Area Chamber of Commerce.

I am appearing to offer testimony in support of Senate Bill No. 5 which would amend K.S.A. 79-3295 in such a way as to exempt extras in motion picture or television productions or television commercials from filing W-4 forms and their respective employers from computing and deducting withholding taxes from the wages earned by these individuals.

As you are aware, Clandon Productions, under contract to CBS, recently filmed "Broken Commandments," a four-hour television mini-series, in Emporia. During the 8 to 10 weeks that they spent in our community, Clandon Productions personnel expended an estimated \$2.5 to \$3 million for various products and services. Specific dollar amounts for expenditures made at some Emporia businesses follow:

Holiday Inn (lodging/food and beverage)	\$100,000
Econo Lodge (lodging)	15,000
Dillons (catering supplies)	20,000
Valu-Line (telephone)	8,500
Stop 2 Shop (gasoline)	8,000
S & S Oil and Propane (gasoline)	4,000
Emporia Business Machines (office equip.)	5,200

Newman's Department Store (retail purchases)	\$ 1,500
Emporia Employment and Training Office	70,400
(driver/clerical placements)	

In addition to these expenditures, Clandon also incurred business expenses for costuming, sets and props, location fees, municipal and county services, vehicle rental, mailing expenses, contract labor, and other production materials and services. During non-working hours, cast and crew members dined at local restaurants, visited local recreational facilities and night spots, and purchased clothing and other personal items.

While it has proven impossible to track the exact amount of dollars spent at Emporia businesses or to identify all firms and individuals who realized immediate benefit from Clandon's expenditures, it is obvious that the production of "Broken Commandments" had widespread and significant economic impact on the city and ultimately upon the state. State revenues realized through Clandon's expenditures include transient guest tax receipts, gasoline tax receipts, and sales tax receipts.

Site selection for movie and television production is obviously up to the discretion of the buyer - i.e., the sponsor, production company, and/or network involved. This being the case, if Kansas is to assure continued economic benefit from film production, it must strive to offer film makers as many incentives as possible. Among the incentives that could be offered the film industry is passage of the proposed amendment to K.S.A. 79-3295. By amending this statute as proposed in Senate Bill No. 5, Kansas can offer film producers direct savings by

by alleviating the labor costs involved in computing withholding taxes on wages paid to extras. This action on the state's part would indicate our willingness to cooperate with the film industry and would enhance our reputation as a desirable production site without adversely affecting state revenues. Wages paid to extras would ultimately be reported on annual tax returns with resulting taxes being assessed at the time returns were filed.

In a time when Kansas - like many states - is struggling with economic issues, it is imperative that we enact changes that will enhance our attractiveness in various markets. Senate Bill No. 5 proposes such a change. I urge its adoption.

Thank you.





**KANSAS DEPARTMENT OF REVENUE**  
*Division of Property Valuation*  
**Robert B. Docking State Office Building**  
**Topeka, Kansas 66612-1585**

M E M O R A N D U M

**TO:** Senator Fred Kerr, Chairman  
Senate Committee on Assessment and Taxation  
and  
Committee Members

**FROM:** Harley T. Duncan, Secretary  
Department of Revenue

**SUBJECT:** 1987 Senate Bill 43 as introduced

**DATE:** January 29, 1987

The provisions of this bill would require the Director of Property Valuation to modify the method the Division currently uses to value personal property with the use of trending factors.

Before we go into the specific provisions of this bill, I would like to briefly review for the committee just what trending factors are and why the Division uses this method to value certain types of personal property. First, each factor in the trending factor table is the result of several mathematical calculations which take into account price fluctuations (price index) and depreciation. The resulting factor is to be applied to original cost to determine the estimated market value of an item of personal property for the current tax year.

The Division first issued trending factors sometime in the late 1960's; however, it seems that many, if not most, counties chose other methods for determining the value of equipment. The more common practice was to accept the taxpayers IRS Depreciation Schedule as evidence of both the items of personal property to be taxed and the depreciated value of those items; however, some other forms of original cost less straight-line depreciation rendered by the taxpayer were also used.

The IRS Depreciation Schedule and other taxpayer rendered depreciation listings no doubt provided useful information relating to the types of property owned and the year it was purchased; however, it did not provide fair market value. In Opinion Number 79-50, dated April 13, 1979, Attorney General Robert Stephan stated: ". . .it is obvious that original price less straight-line depreciation and fair market value are not equivalent bases on which to assess property." This position was restated in Opinion Number 80-82, dated March 31, 1980, in the following words:

". . .original price less straight-line depreciation very frequently will yield a significantly different valuation than that based on "fair market value." We again indicate that straight-line depreciation does not take into account many of the factors implicit in "fair market value," as defined in K.S.A. 79-503."

The problem was compounded by the fact that the IRS did not always use straight-line depreciation. Rather, depreciation schedules were often accelerated to allow more rapid depreciation in the early years an asset was placed in to service to allow the income taxpayer to recover the investment cost more rapidly, thereby stimulating further investment. In addition, the 1981 Economic Recovery Tax Act reduced the economic life of many assets in a fashion that was not consistent with the length of time an asset could reasonably be expected to perform and even within these shortened economic lives, depreciation was computed on an accelerated basis. Finally, under IRS rules an asset could be depreciated to zero value for income tax purposes.

In July 1981, the Board of Tax Appeals ruled in the Capital City Rentals Inc. case that use of trending factors insured uniformity and equality. The Board stated: ". . .use of the trending factors other than those prescribed by the Director, is arbitrary and contrary to the ad valorem tax statutes of this State. The purpose of the Guides prescribed by the Director is to insure uniformity and equality of assessment of personal property, irrespective of its physical location in this State. Disregard of these Guides destroys that goal."

It was approximately this time, in response to this Board of Tax Appeal's order and others as well as the growing number of Attorney General's opinions that IRS depreciated value was not market value, that the Division began enforcing the use of trending factors by all counties. As a result of this action, and probably for the first time, all property for which a specific guide was not prescribed was valued uniformly and equally statewide. However, in accomplishing the uniformity, much property which had previously been valued based on IRS depreciated value or some other taxpayer provided value was now valued at estimated market; in addition, much property which had "depreciated out" according to IRS was now placed on the tax roll and assigned a value and most county appraisers began dedicating more effort to locating and listing property which may have been escaping taxation.

The combination of these factors, combined with any mill levy increases which may have accrued, resulted in a higher tax bill for many businesses. This resulted in a myriad of bills being introduced during the 1983 and 1984 Legislative Sessions. These bills would have variously prohibited the use of trending factors, prescribed the methods by which trending factors could be calculated, severely restricted the application of trending factors, or provided some combination of these concepts.

The Division readily admitted at that time that the formula then used might not be the best or the most appropriate. However, we did not believe the formula should be changed without sufficient study and

we strenuously opposed the enactment of any legislature which would result in a mandated value which was something other than market value.

The result was the 1984 Legislature appropriated \$50,000 for the Department to contract with an independent agency to study the use of trending factors in Kansas and make such recommendations as necessary. The Department contracted with the Institute of Economic and Business Research of the University of Kansas to conduct this study. A copy of that study has been provided to each of you.

During 1984 and prior years the Division computed trending factors using the Consumer Price Index (C.P.I.) as an estimator of market price fluctuation; straight-line depreciation over the life of the asset; 10% salvage value; and for 1983 and 1984 a 15% reduction was applied to all factors to reflect functional and economic obsolescence. Economic lives were determined mostly from IRS Bulletin F revised in 1954.

Trending factors, beginning in 1985, have been computed incorporating most of the Study recommendations. The estimator of market price fluctuation is currently the Producer Price Index for capital equipment (PPI); a more generous first year decline in value (20%) is now used; accelerated depreciation is currently used based upon the 150 percent declining balance method; asset values are allowed to depreciate one and one-half times their economic life or to 20%; and economic lives are determined from Marshall Valuation Service.

One of the primary findings of the Study was that the factors that were previously used tended to over value newer property and under value older property.

For presentation to this committee we have prepared a trending factor table for 1987 as it would have appeared, if we had not adopted the recommendations of the 1984 Study. A copy of that table is Attachment I; a copy of the 1987 table as prescribed by the Division is Attachment II.

We have prepared the following table to illustrate, for selected purchase years and selected economic lives, the difference in valuation which would occur for a piece of equipment with an original cost of \$50,000.

TRENDING FACTOR COMPARISON TABLE

Assume a \$50,000 Piece of Equipment

5 YEAR ECONOMIC LIFE

Purchase Year	Value Using New System	Value Using Old System	Actual Difference	Difference %
1984	\$15,000	\$21,500	\$(6,500)	(43)%
1980	8,000	5,000	3,000	37

10 YEAR ECONOMIC LIFE

1984	26,500	33,500	(7,000)	(26)
1980	18,500	22,500	(4,000)	(22)
1970	10,000	8,000	2,000	20

20 YEAR ECONOMIC LIFE

1984	34,000	40,000	(6,000)	(18)
1980	33,000	35,500	(2,500)	( 8)
1970	31,000	29,500	1,500	5
1960	16,500	14,500	2,000	12

As can be seen from the above table, a piece of equipment that was purchased in 1984 for \$50,000 would have an estimated market value of \$26,000 for tax year 1987 under the present formula as compared to a value of \$33,500 under the old formula. A reduction of \$7,000 or 26%.

This comparison is valid only if the economic life of the item did not change, in fact however, lives of many items were reduced by changing to Marshall Valuation Service. If we use the same assumptions as above but assume that the \$50,000 piece of equipment is construction equipment, the life under the old system would have been either 10 or 12 years, using Marshall it is 6. Therefore the 1987 valuation would actually be \$18,000 under this system as compared to \$33,500 using the pre-1985 system or a difference of \$15,500.

The bill under consideration today would require that only an index "reasonably applicable" to the property affected be used to prepare guides. Obviously, what is reasonable to some will not be reasonable to all. I am sure that no matter how many indices the Director used, someone would be able to produce a published index that was more "reasonably applicable" to their property.

Bureau of Labor Statistics publications indicate that in the Produce Price Index alone, there are indices for 493 mining and manufacturing industries and 6,000 published product indexes. Each of these would have to be completely reviewed to determine whether or not it had Kansas applications. In addition to PPI indexes, price indexes are available from many other sources. The result could well be a trending factor guide consisting of thousands of pages. If this were the case all claims for equality and uniformity would be lost as county appraisers do not have, nor could they be expected to have, the necessary expertise to properly classify each industry given so many options.

One further point should be made before we leave the discussion of indices, the PPI capital equipment which we now use is a weighted average of all the thousands of indices mentioned above, as with any average, some of the components will be less than the average but conversely, many of the components will be higher.

The bill would also require the Director to determine reasonable economic lives based upon objective evidence. As previously stated, the Division currently uses asset lives as published by Marshall Valuation Service, we do not know of a more objective published source. In those cases where specific industries contend that the economic life of their property is other than that published by Marshall the Director will meet with representatives of the industry and review any evidence presented. If the Director is convinced by objective evidence that the life should be changed it is. If the industry is unsatisfied by the Director's decision they still have protest opportunities with the State Board of Tax Appeals and the courts.

If by passage of this bill it becomes necessary for the Director to gather and document objective evidence first hand by visual, on site, inspections and appraisal, as well as in house research, then a considerable amount of administrative expense will be involved.

The provision which would mandate that the guide value could not exceed original cost unless the Director could prove that it could be sold for more than original cost, we believe, places an unrealistic burden on the director. We would like to refer the committee to page 43 of the Trending Factor Study, "Summary of Findings" items 1 and 6. These findings state in part that: Inflation does impact asset prices. It reduces the rate of decline in value, putting upward pressure on used asset prices. Market prices of used assets can and do exceed original cost of some assets.

The final provision of this bill would prohibit the use of the income approach in valuing personal property. While this provision would have no impact on any current practices or procedures, we believe it is a bad precedent to limit the tools at the Director's disposal to determine market value of any type of property.

Finally this bill would be in effect July 1, 1987, and apply to tax years commencing after December 31, 1986 (current year). Current law prohibits the Director from making any changes in guides or methodology after June 30, for use in the current year. It would be impossible to make a study of the magnitude required by this bill and have the results ready for use prior to June 30. In addition, if only a cursory study were made and additional trending factor tables were issued prior to June 30, county appraisers would be required to revalue every piece of machinery and equipment in their county which is currently valued by use of trending factors.

In summary, it is the Division's position that we have complied with the intent of the provisions of this bill. Since the introduction of the 1985 trending factors the Division has received very few complaints from either taxpayers or county appraisers about trended values.

This is a mass appraisal approach and with any mass appraisal approach it is not going to "hit" every time. If there are specific problems with industries out there that we have not heard from we would appreciate either this committee, or the industries notifying us immediately of the nature of the problem so that corrective action, if warranted, can be taken.

dpb

## 1987 DATA WITH PRE-1985 FORMULA

Purchase Year	Economic Life									Purchase Year	
	3 Years	5 Years	7 Years	10 Years	12 Years	15 Years	20 Years	25 Years	30 Years		
1987	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1987
1986	0.60	0.71	0.75	0.78	0.79	0.81	0.82	0.82	0.83	0.83	1986
1985	0.36	0.57	0.66	0.73	0.76	0.78	0.82	0.83	0.83	0.84	1985
1984	0.09	0.43	0.57	0.67	0.71	0.76	0.80	0.82	0.82	0.83	1984
1983		0.27	0.47	0.61	0.67	0.73	0.79	0.82	0.82	0.86	1983
1982		0.10	0.36	0.54	0.62	0.70	0.77	0.82	0.82	0.84	1982
1981			0.25	0.49	0.60	0.69	0.79	0.84	0.84	0.88	1981
1980			0.12	0.45	0.57	0.70	0.83	0.91	0.91	0.95	1980
1979				0.39	0.55	0.71	0.88	0.98	0.98	1.05	1979
1978				0.29	0.49	0.69	0.90	1.02	1.02	1.10	1978
1977				0.16	0.40	0.65	0.88	1.03	1.03	1.12	1977
1976					0.30	0.58	0.86	1.01	1.01	1.13	1976
1975					0.18	0.50	0.83	1.03	1.03	1.16	1975
1974						0.44	0.85	1.07	1.07	1.23	1974
1973						0.35	0.82	1.11	1.11	1.28	1973
1972						0.23	0.76	1.05	1.05	1.26	1972
1971							0.66	0.99	0.99	1.23	1971
1970							0.60	0.97	0.97	1.22	1970
1969							0.50	0.93	0.93	1.22	1969
1968							0.42	0.88	0.88	1.19	1968
1967							0.29	0.80	0.80	1.14	1967
1966								0.71	0.71	1.09	1966
1965								0.63	0.63	1.02	1965
1964								0.52	0.52	0.94	1964
1963								0.43	0.43	0.87	1963
1962								0.31	0.31	0.78	1962
1961										0.70	1961
1960										0.61	1960
1959										0.52	1959
1958										0.43	1958
1957										0.34	1957

1987 TRENDING FACTOR TABLE

Purchase Year	Economic Life																														Purchase Year
	3 Years	4 Years	5 Years	6 Years	7 Years	8 Years	9 Years	10 Years	11 Years	12 Years	13 Years	14 Years	15 Years	16 Years	17 Years	18 Years	19 Years	20 Years	21 Years	22 Years	23 Years	24 Years	25 Years	26 Years	27 Years	28 Years	29 Years	30 Years			
1937	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1987	
1986	0.41	0.51	0.57	0.61	0.64	0.66	0.68	0.70	0.71	0.72	0.72	0.73	0.74	0.74	0.75	0.75	0.75	0.76	0.76	0.76	0.76	0.77	0.77	0.77	0.77	0.77	0.78	0.78	1986		
1985	0.21	0.33	0.41	0.47	0.52	0.55	0.58	0.61	0.63	0.64	0.66	0.67	0.68	0.69	0.70	0.71	0.71	0.72	0.72	0.73	0.73	0.74	0.74	0.75	0.75	0.75	0.75	0.76	1985		
1984	0.11	0.21	0.30	0.36	0.42	0.46	0.50	0.53	0.56	0.58	0.60	0.61	0.63	0.64	0.65	0.67	0.67	0.68	0.69	0.70	0.71	0.71	0.72	0.72	0.73	0.73	0.74	0.74	1984		
1983	---	0.14	0.21	0.28	0.34	0.39	0.43	0.46	0.49	0.52	0.54	0.56	0.58	0.60	0.61	0.63	0.64	0.65	0.66	0.67	0.68	0.69	0.70	0.71	0.71	0.72	0.72	0.73	0.73	1983	
1982	---	---	0.16	0.22	0.28	0.33	0.38	0.42	0.45	0.48	0.51	0.53	0.55	0.57	0.59	0.61	0.62	0.64	0.65	0.66	0.67	0.68	0.69	0.69	0.70	0.71	0.71	0.72	0.72	1982	
1981	---	---	---	0.18	0.24	0.30	0.35	0.39	0.43	0.46	0.50	0.53	0.55	0.57	0.59	0.61	0.62	0.64	0.65	0.66	0.67	0.68	0.69	0.70	0.71	0.71	0.72	0.73	0.73	1981	
1980	---	---	---	---	0.21	0.27	0.32	0.37	0.41	0.45	0.49	0.52	0.55	0.57	0.59	0.61	0.63	0.65	0.66	0.68	0.69	0.70	0.71	0.72	0.73	0.74	0.75	0.76	0.76	1980	
1979	---	---	---	---	0.20	0.24	0.29	0.34	0.39	0.43	0.47	0.50	0.55	0.58	0.60	0.62	0.64	0.66	0.68	0.70	0.71	0.73	0.74	0.76	0.77	0.78	0.79	0.80	0.80	1979	
1978	---	---	---	---	---	0.21	0.26	0.31	0.36	0.40	0.45	0.48	0.52	0.57	0.59	0.62	0.65	0.67	0.69	0.71	0.73	0.74	0.76	0.77	0.79	0.80	0.81	0.83	0.83	1978	
1977	---	---	---	---	---	0.20	0.23	0.28	0.33	0.38	0.42	0.46	0.50	0.55	0.59	0.61	0.64	0.67	0.69	0.71	0.73	0.75	0.77	0.79	0.80	0.82	0.83	0.85	0.85	1977	
1976	---	---	---	---	---	---	0.21	0.26	0.30	0.35	0.40	0.44	0.48	0.52	0.55	0.59	0.62	0.65	0.68	0.70	0.73	0.75	0.77	0.79	0.81	0.82	0.84	0.86	0.86	1976	
1975	---	---	---	---	---	---	0.20	0.25	0.30	0.35	0.40	0.44	0.48	0.52	0.55	0.59	0.62	0.65	0.68	0.70	0.73	0.75	0.77	0.79	0.81	0.83	0.85	0.87	0.87	1975	
1974	---	---	---	---	---	---	---	0.24	0.30	0.35	0.40	0.45	0.50	0.54	0.58	0.62	0.66	0.69	0.72	0.75	0.78	0.81	0.84	0.86	0.89	0.91	0.93	0.95	0.95	1974	
1973	---	---	---	---	---	---	---	0.21	0.27	0.32	0.37	0.41	0.46	0.51	0.56	0.60	0.65	0.69	0.73	0.77	0.80	0.84	0.87	0.90	0.93	0.96	0.98	1.01	1.03	1973	
1972	---	---	---	---	---	---	---	0.20	0.24	0.29	0.34	0.39	0.44	0.49	0.53	0.58	0.62	0.66	0.70	0.74	0.77	0.81	0.84	0.87	0.90	0.93	0.96	0.99	1.01	1972	
1971	---	---	---	---	---	---	---	---	0.21	0.26	0.31	0.36	0.41	0.46	0.51	0.55	0.59	0.64	0.68	0.72	0.75	0.79	0.82	0.86	0.89	0.92	0.95	0.99	1.01	1971	
1970	---	---	---	---	---	---	---	0.20	0.24	0.29	0.34	0.39	0.44	0.48	0.53	0.57	0.62	0.66	0.70	0.74	0.77	0.81	0.84	0.87	0.90	0.93	0.96	0.99	1.01	1970	
1969	---	---	---	---	---	---	---	---	0.22	0.26	0.31	0.36	0.41	0.45	0.50	0.55	0.59	0.64	0.68	0.72	0.75	0.79	0.82	0.86	0.89	0.92	0.95	0.99	1.01	1969	
1968	---	---	---	---	---	---	---	---	---	0.22	0.26	0.31	0.36	0.41	0.45	0.50	0.55	0.59	0.63	0.67	0.71	0.75	0.79	0.82	0.86	0.89	0.92	0.95	0.99	1968	
1967	---	---	---	---	---	---	---	---	---	---	0.24	0.29	0.34	0.38	0.43	0.47	0.52	0.56	0.61	0.65	0.69	0.73	0.77	0.80	0.84	0.87	0.90	0.94	0.94	1967	
1966	---	---	---	---	---	---	---	---	---	---	0.22	0.27	0.31	0.36	0.40	0.45	0.49	0.54	0.58	0.62	0.67	0.70	0.74	0.78	0.82	0.85	0.89	0.92	0.92	1966	
1965	---	---	---	---	---	---	---	---	---	---	0.24	0.29	0.33	0.38	0.42	0.47	0.51	0.55	0.60	0.64	0.68	0.72	0.75	0.79	0.83	0.86	0.89	0.89	1965		
1964	---	---	---	---	---	---	---	---	---	---	---	0.26	0.30	0.35	0.39	0.44	0.48	0.52	0.56	0.60	0.64	0.68	0.72	0.76	0.79	0.83	0.86	0.86	1964		
1963	---	---	---	---	---	---	---	---	---	---	---	0.24	0.28	0.32	0.36	0.41	0.45	0.49	0.53	0.57	0.61	0.65	0.68	0.72	0.76	0.79	0.83	0.86	1963		
1962	---	---	---	---	---	---	---	---	---	---	---	---	0.25	0.29	0.33	0.37	0.41	0.45	0.49	0.53	0.57	0.61	0.65	0.68	0.72	0.75	0.79	0.79	1962		
1961	---	---	---	---	---	---	---	---	---	---	---	---	---	0.27	0.31	0.35	0.38	0.42	0.46	0.50	0.54	0.58	0.61	0.65	0.68	0.72	0.75	0.75	1961		
1960	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.25	0.28	0.32	0.36	0.39	0.43	0.47	0.51	0.54	0.58	0.61	0.65	0.68	0.71	0.71	1960	
1959	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.26	0.29	0.33	0.37	0.40	0.44	0.47	0.51	0.54	0.58	0.61	0.65	0.68	0.68	1959	
1958	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.28	0.31	0.35	0.38	0.42	0.45	0.49	0.52	0.56	0.59	0.62	0.66	0.66	1958	
1957	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.26	0.30	0.33	0.37	0.40	0.44	0.47	0.51	0.54	0.57	0.61	0.64	0.64	1957	
1956	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.29	0.33	0.36	0.40	0.43	0.47	0.51	0.54	0.58	0.61	0.65	0.65	1956	
1955	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.33	0.36	0.40	0.44	0.48	0.51	0.55	0.59	0.62	0.66	0.66	1955	
1954	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.31	0.35	0.38	0.42	0.46	0.50	0.53	0.57	0.61	0.65	1954	
1953	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.33	0.36	0.40	0.44	0.47	0.51	0.55	0.58	0.62	1953	
1952	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.35	0.38	0.42	0.45	0.49	0.53	0.56	0.60	1952	
1951	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.33	0.36	0.40	0.44	0.47	0.51	0.54	0.58	1951	
1950	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.37	0.41	0.45	0.49	0.53	0.56	0.60	1950	
1949	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.40	0.43	0.47	0.51	0.55	0.59	1949	
1948	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.39	0.43	0.47	0.51	0.55	0.58	1948
																									0.44	0.48	0.52	0.56	0.61	1948	