



Assessing the

RISK:

$$\ln \left(\frac{S_0}{PV(X)} \right) / \sigma \sqrt{t}$$

A History of
Actuarial Science
at the University
of Manitoba



UNIVERSITY
OF MANITOBA

$$[AV_n] = E[(1 + i_1)(1 + i_2)]$$

$$= (1.1236)(1.09) + (1.16)$$



“Actuarial Science continues to expand into new areas. Continent-wide, the University of Manitoba continues to be considered the respected place for doing it right.”

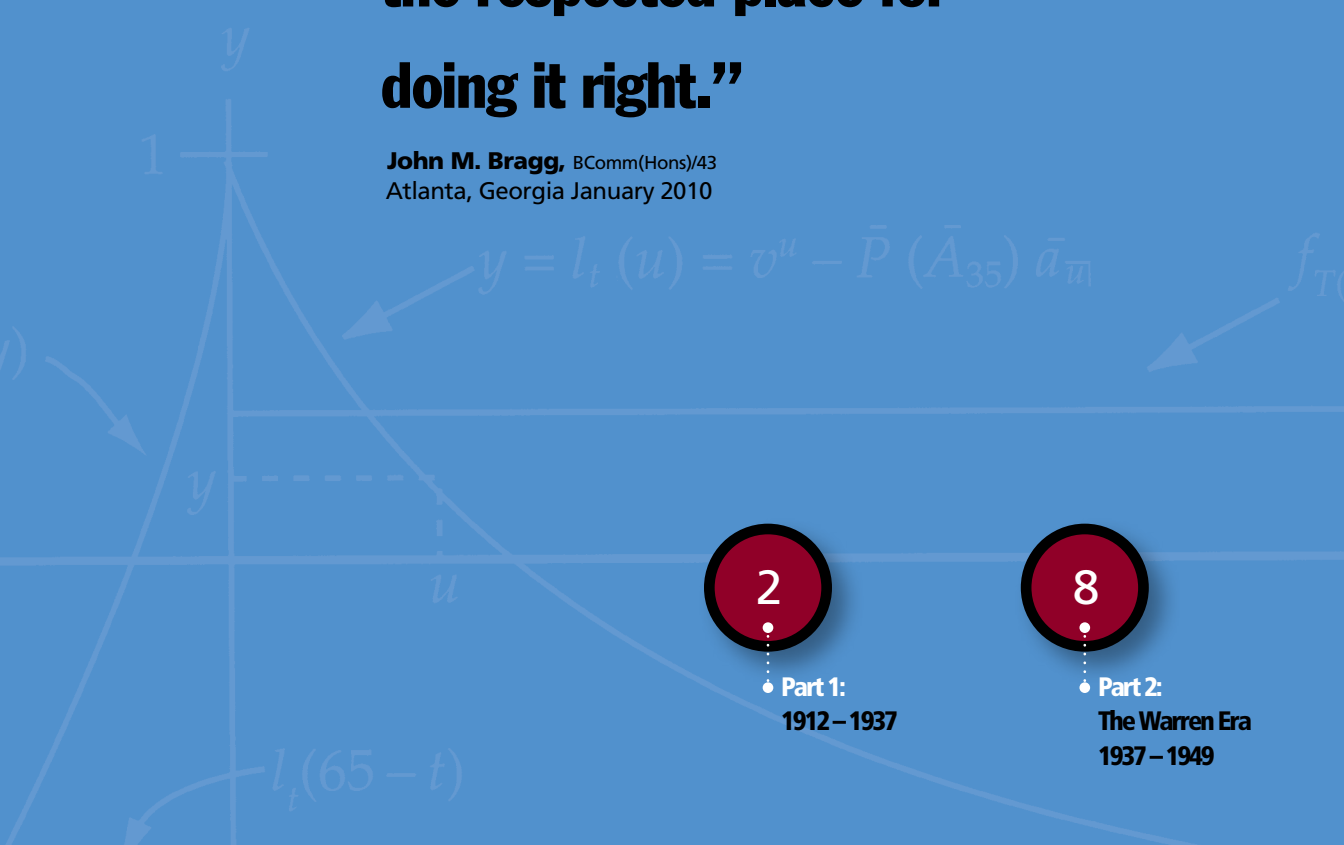
John M. Bragg, BComm(Hons)/43
Atlanta, Georgia January 2010



• Part 1:
1912 – 1937



• Part 2:
The Warren Era
1937 – 1949



Preface

In 1912, the first actuarial courses were offered at the University of Manitoba.

Why would a thirty-nine year old university, with a staff of “twenty-three professors, lecturers and demonstrators” and approximately 800 students, in a city of some 166,000 offer courses in actuarial science? In 1912? Or ever? Why indeed.

Why the actuarial science program at the University of Manitoba was established in the first place, why it is part of the Asper School of Business, and how it became the Warren Centre for Actuarial Studies and Research is a study of vision, dedication, perseverance and survival, not a study in smooth transition. Its corrugated past is peppered with peaks and valleys, iconic professors, actuarial superstars, a supportive insurance industry and loyal alumni who saved it from an uncertain future and whereabouts, from some School leaders who questioned the relevance of the program in a business school. Today, almost 100 years later, the program (which now includes strong research and outreach components) is a source of pride for Manitobans and Canadians alike. It is globally recognized for its excellence and can claim credit as the source of many of the senior leaders in the insurance and risk management industries in North America.



History is often typecast, wrongly, as being dull and boring. A history of an actuarial science program might therefore have two strikes against it. The history that follows will erase those misconceptions. It should also give you an appreciation of our pride in the program and knowing where it came from and how it got to where it is today.

We gratefully thank Murray Taylor, BSc (Hons)/76, whose generous support enabled the telling of this story.

Dr. Glenn Feltham, PhD

Dean, Asper School of Business
CA Manitoba Chair in Business Leadership

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$$= (1.1236)(0.09) + (1.1448)(0.2)$$

1

Part 1:

Beginnings 1912-1937



Actuarial science made its quiet debut at the University of Manitoba in 1912, the same year the Province expanded its boundaries to become the size and shape it is today, in an era when the railways were the dominant employer.

Although approved by the University in 1910 and announced in the course calendar the following year, Course 26, *Finite Differences* (first term, September 1912), and Course 27, *Theory of Probability and Life Contingencies* (second term, January 1913), were first offered in the 1912-1913 University Session. These were compulsory, 4th year half courses with two lectures a week taught by a faculty of two. They were among the twelve courses available through the Department of Mathematics and Astronomy, a department within the Faculty of Arts and Science, in its 4th year curriculum. There were three, 4th year students enrolled; one of them, W. Burton Hurd, BA/13, won the Gold Medal in Mathematics in 1913, not necessarily an annual award. Hurd was also the University's Rhodes Scholar in 1917.

Over the next twenty-five years, actuarial science marched steadily forward, without any discernible hiccups, toward departmental status in 1937. The same cannot be said

about the introduction of undergraduate business courses. They were decades in the making. The University's efforts were genuinely earnest. The Administration was onside.

26. *Finite Differences*—A course of lectures on the principles of the Calculus of Finite Differences, and the Theory of Operators.
References—Boole's *Finite Differences*, Institute of Actuaries Text Book, Part II.
Two hours per week, First Term.....Mr. Warren
(To be given for the first time in Session 1912-13.)
27. *Theory of Probability and Life Contingencies*—A course of lectures on the mathematical theory of probability, and on the elements of the Theory of Life Annuities, Life Assurances and Life Contingencies.
References—Hall and Knight's *Higher Algebra*, Moir's *Life Assurance Primer*; King, *Theory of Finance*; The Institute of Actuaries' Text Book, Parts I. and II.
Two hours per week, Second Term..Professor MacLean
(To be given for the first time in Session 1912-13.)

Advisory committees on the subject, made up of campus and business community members, were established in 1904 and again in 1917. Curriculums were proposed and approved. There was a fervent will but no financial way. The best the campus and the community could do was to introduce a series of diploma-status, extension and/or evening courses in business prior to the creation of the Department of Commerce in 1937.

The first two actuarial courses as announced in the University's 1911-1912 Calendar

(Archives and Special Collections, University of Manitoba.)

(far left) Main Street, Winnipeg, looking north, circa 1912.

(Archives of Manitoba, Winnipeg Streets, 1912, N17779, Picture 6.)



**Main Street,
Winnipeg,
looking south
from William
Avenue, circa
1912**

(Archives of Manitoba,
Winnipeg Streets, 1912,
N17770, Picture 8.)

That said, what is most interesting from an actuarial point of view is that there was an actuarial component to each and every one of the proposed curricula and in the evening and extension course offerings also. By way of example, *Life Insurance* was one of the fifteen courses offered in the 1917 inaugural program of Evening Business Courses. It was taught mainly by members of Winnipeg's life insurance industry, none of whom were paid for services rendered. The course fee was one dollar.

But why? Why would a thirty-nine year old university, with a staff of "twenty-three professors, lecturers and demonstrators" and approximately 800 students, in a city of some 166,000 offer courses in actuarial science in 1912?

Or ever? Given zero documentation extant, the lack of hard evidence means that the questions must remain unanswered. That said, a consideration of the climate of the times and the characters involved must not be overlooked because, together, they allow for some responsible speculation on what might have happened and how the courses came about. We begin off campus.

No year in the City of Winnipeg's history epitomized energy and optimism more than 1912. "As Canada's most cosmopolitan and ethnically diverse centre, with 21 millionaires, with most of its population under the age of forty, Winnipeg was also the country's liveliest (and third largest) city. Winnipeg was the centre of

banking, the grain trade, and railroad operations.”¹ It was also one of two locations in Canada where you could take university-level courses in actuarial science, the other being Toronto. (*After Toronto, Manitoba has the second oldest actuarial program in Canada and, after Toronto, Michigan and Iowa, the fourth oldest in North America.*) Maybe actuarial science is just another example of Winnipeg, a rather isolated city, wanting its own, within easy driving distance – its own ballet, opera company, university, or sports franchises – rather than having to travel elsewhere for the experience or subsist on a meagre diet of

1911 census – Winnipeg did have an established insurance industry. The *Henderson Directory* for 1912 shows that, while the industry was mainly made up of insurance agents or the Winnipeg Branches of national insurance companies, Winnipeg was the headquarters for at least three fire insurance companies (British Northwestern, North Empire, and Winnipeg), one bank (Northern Crown Bank) and three life insurance companies (Great-West, Monarch and Sovereign). Great-West, founded in 1891, had recently built, in 1909, and moved into impressive new headquarters at 177 Lombard Avenue.

No year in the City of Winnipeg’s history epitomized energy and optimism more than 1912.

periodic one-night stands passing through town.

While the four railways were definitely the dominant employers – ten per cent of the population worked for them according to the

They all employed actuaries or needed their professional expertise. Yet there is nothing to show that the insurance industry or the actuarial profession lobbied for the cause. The industry did, however,



Workers in the Transcona Shops, circa 1915, the repair depot for the forerunners of the Canadian National Railways. The railways were Winnipeg’s dominant employer at the time.

(Archives of Manitoba, Still Images Section, Foote Collection, Negative 2592.)

Opened in 1911 as a four-storey building at 177 Lombard Avenue, an additional four floors were added to the Great-West Life headquarters in 1923.

(Great-West Life Assurance Corporate Archives.)



have representation on those business-community committees seeking undergraduate business course at the campus. *(Several years later, in 1938, when the degree Bachelor of Commerce in Actuarial Science (“B.Com.Act.Sc.”) was proposed, the local actuarial profession objected “to a Bachelor of Commerce degree bearing the tag ‘actuarial science’.” To placate the profession’s objection, the name of the degree was changed to Bachelor of Commerce (Hons) “without any professional tag.”)*²

There is also no evidence that the local life insurance companies or representatives of the profession ever sat down with the Department of Mathematics and Astronomy and made a case for actuarial science. But if they had, their request would

have found a sympathetic audience in Neil Bruce MacLean, the newly appointed Head of the Department, and his new Department partner, Lloyd Arthur Heber Warren, Lecturer.

With the exception of being “absent on military service” in World War I for three sessions, MacLean was Head of the Department from 1910 until the 1927-1928 Session, when he last appears on the faculty list. Much more is known about Warren.

Warren was born on November 18, 1879, in Balderson, Ontario. From his obituary, we learn that Warren had a life-long love affair with actuarial science. He was smitten by it before he came to the University of Manitoba in 1910. Since both he and MacLean earned professional

actuarial accreditations, they surely were kindred spirits on the subject and maybe even visionaries of its importance. “We’re offering astronomy; why not actuarial science?” you can hear them say, perhaps implying that one esoteric or specialized subject justified another. Maybe Warren was the answer to MacLean’s prayers – for a staff member with the skills to get the program up and running. Or, perhaps Warren wore him down with an insistence and enthusiasm to add actuarial science to the curriculum. There could be other scenarios as well. What is not debatable is the fact that in the year following Warren’s arrival,

academic watchdog over courses and content.) Otherwise, actuarial science was grafted on to an existing department. There were no financial hurdles, no professors to recruit, and no protests from the departmental staff over an increased course load – because they had brought it on themselves. Quite possibly, there were other influences and individuals involved, but to give credit where credit is due and that can be documented, MacLean and Warren get the honours. *(Later on, with the establishment of the School of Commerce* in 1949, one gets the impression the University was a silent partner all along, and just as onside actuarially as it had*

Since both he and MacLean earned professional actuarial accreditations, they surely were kindred spirits on the subject and maybe even visionaries of its importance.

two actuarial science courses were announced to commence in the fall of 1912: *Finite Differences* taught by “Mr. Warren” and *Theory of Probability and Life Contingencies*, by “Professor MacLean.”

It took thirty-three years (1904-1937) to establish a Department of Commerce at the University of Manitoba but only on the condition that \$2500 be found to pay for it “for each of the next four years after which the course will be self-supporting.”³ In contrast, actuarial science had it easy. Of course the two courses needed approval by a higher authority and they were duly blessed on November 16, 1910 by the Board of Studies (now the University Senate, the

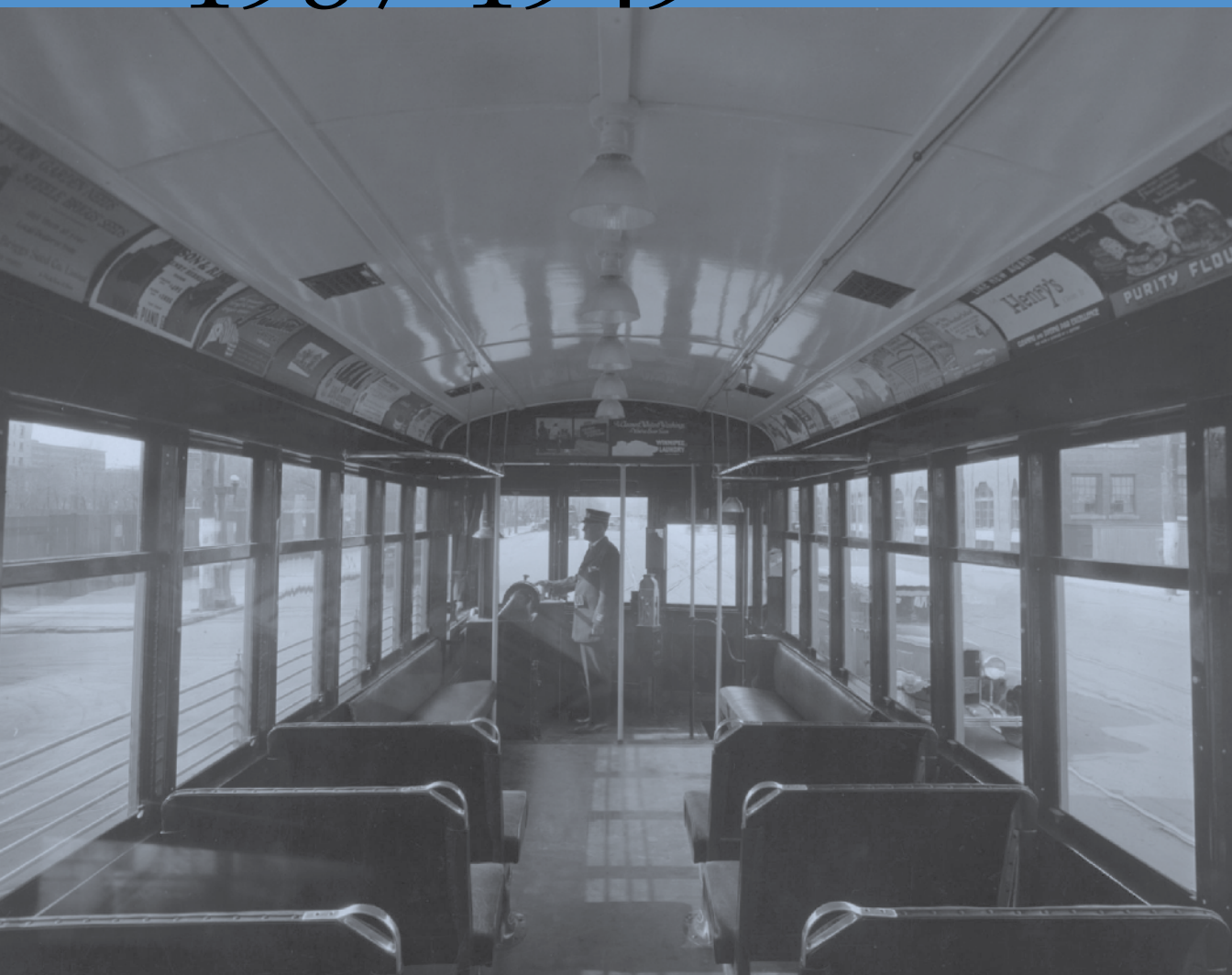
been with the business courses. In the 1949-50 Calendar for instance, in a section on the history of the School, it is stated: “it being the intention of the University that one of the options leading to the degree Bachelor of Commerce would enable students to specialize in actuarial science.”)

**The School would become the Faculty of Commerce (1970), of Administrative Studies (1972), of Management (1986), and the Asper School of Business (2000). For this history, School and Faculty are synonyms.*

2

Part 2:

The Warren Era 1937-1949



Between the introduction of those cornerstone courses in 1912 and the establishment of the Department of Actuarial Science in 1937, coincident with the University’s Diamond Jubilee year, actuarial science grew in breadth, depth, and sophistication by expanding its undergraduate and graduate course offerings.

Warren grew in breadth, depth and sophistication, too. In 1913, he realized a PhD in astronomy from the University of Chicago. As well, he earned several actuarial professional designations that showed, according to his obituary, “the quiet perseverance of the man” toward his passion.

Warren was the department’s first head and a University faculty member for thirty-nine years. He “never knew what it was to have a Sabbatical. He taught through every university year (except for one due to illness) and then taught his six weeks of summer school,” recalls his daughter Jean (Warren) Robertson.⁴

Prior to buying a car, Warren walked a mile to catch public transportation to get to and from work. Once at the office, he faced a myriad of duties, one of which was to file a yearly report with the University President for inclusion in the latter’s Annual Report. Warren’s reports provide narrative snapshots of the Department during his term. They contain lists of courses offered and enrolments. The courses were fine-tuned and expanded. Enrolments increased partly because

actuarial courses were offered to students in faculties other than Arts and Science (in Agriculture, for instance) and partly because of demand for the end product.



He documents, on two occasions, the growing demand for actuaries that exceeded the Department’s supply capabilities. In his report of 21st April 1944, for instance, Warren wrote: “There is a constant demand for graduates in this field, which we are not able to meet.”

The father of five, Warren is shown in this photo, circa 1911, with his only son Earle, age 2. (Earle graduated from the actuarial program in 1930 at the age of nineteen.) Warren’s paternalism extended to the classroom and became legendary among his students.

(Anne Robertson)

(far left) Until he purchased a car, Lloyd Warren used public transportation to get to and from work. Perhaps he was a passenger on this streetcar of the 1930s.

(Winnipeg Transit)

Department of Actuarial Science

To the Dean of the Faculty of Arts and Science.

I herewith submit the first Annual Report of the Department of Actuarial Science.

This Department was established in September 1937, Statistics, Mathematics of Finance, Theory of Probability, and the Mathematical Theory of Life Contingencies were assigned the session 1937-1938 part of the work in Mathematics for Science students was also conducted by this Department.

During the session 1937-1938 the following courses were conducted:

	Hours per Week
Commerce 11 - Mathematics of Investment	2
Commerce 11 - Geometry and Trigonometry	2
Commerce 11 - Special Actuarial Mathematics	2
Arts and Science 111 - Statistical Method	2
Arts and Science 1V - Mathematics of Investment	1
Arts and Science 1V - Probability	1
Arts and Science 1V - Finite Differences	
Arts and Science V - Mathematical Theory of Life Contingencies	4

In addition to the above, the work of one student was directed towards the degree for Preliminary Master of Actuarial Science course

A portion of the first Annual Report of the Department of Actuarial Science

(President's Report, for the year ending 30th April 1938, Archives and Special Collections, University of Manitoba.)

There were budgetary restraints. A Statistics Laboratory course, introduced in 1938-1939 for 3rd year Commerce students, was still under-equipped in 1945. But there was hope. In that same year, according to Warren's report, "a start was made towards equipping the Statistics laboratory by the purchase of five Monroe calculating machines. More machines of this type are urgently needed if the work in Statistics is to be conducted as it should be." (Dozens of Monroe calculators - hopefully not those from 1945 - were sold in the University Garage Sale of 1983. Obsolete in the classroom, the machines had the potential for second careers: their weight and size made them ideal candidates for use as ballast or as fill for a dock crib.)

"This year sees the graduation of our first class in the Honours

Course in Commerce (Actuarial Science Option)" wrote Warren in his report of 30th April 1941. It was a class of four, all with BComm (Hons)/41 degrees: John Louis Hoffart, (from Tramping Lake, Saskatchewan, and the Gold Medalist), Leonard Oscar Johansson, Arthur Churchill Longman, and Edward George Alva Palmer. What Warren neglected to say was that these four men were graduates with a difference, a significant and distinctive difference that set them apart from actuaries trained elsewhere in Canada. The hallmark of actuarial studies at the University of Manitoba has always been that you never studied such courses exclusively, siphoned off from other subjects. Initially, it was an Arts degree. Now, with the presence of the Department of Commerce, it was also available as

a course of study in combination with business subjects. This made for a focused, yet well-rounded graduate, someone keenly adept at mathematics but with a management education as well. It was unique in Canada in 1941 and remains so today. It is also one of a few actuarial science programs in North America that is part of a business school.

Warren took a paternal interest in his students, in “My Boys” as he referred to them. He was devoted to them, took pride in their accomplishments and kept in touch with them after graduation, a

Life, of which he eventually became President. Another recruit was E. Sydney Jackson, BComm (Hons)/47, who served as a lecturer in the 1947-48 session. Jackson enjoyed his teaching experience, but his heart was elsewhere. “It was interesting, and I reflected on how rewarding it would be to work with students and follow their careers. But I did not have the patience that teaching required and I was more interested in a business career.”⁶ Warren saw matters differently. He gave Jackson top marks as a teacher. In his report of 4th May 1948, Warren penned the following praise of Jackson: “It is most unfortunate we could not offer him

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practice continued by his successors. Jean Robertson recalls, “It was the custom, almost daily, to set an extra place at the table to welcome a friend or one of Dad’s new students. On occasion, the student not only stayed for dinner, but also for a few nights with us until he located a satisfactory place to live.”⁵ Warren also found them work, a kindly act that also helped reduce the pressures on his departmental operating budget.

Recent graduates were recruited, some from industry, as “tutors and demonstrators,” to help teach courses on a part-time, sessional basis. Harold Thompson, BComm (Hons)/44, came from Monarch

sufficient salary to induce him to continue in the teaching profession, for he was eminently successful as an instructor.” (*Jackson, however, did realize a career in industry that, among other things, offered him “sufficient salary”: he became Chairman and President of Manufacturers Life Insurance Company.*) Jackson also has vivid and fond memories of Warren. “He acted more like a high school teacher than a professor. He kept close watch on the progress of his students. He would keep track of you and made sure you did your homework. I was very fond of Dr. Warren.”⁷ So was John M. Bragg, BComm (Hons)/43.



Jack Bragg was a nineteen-year old physics student in 1940 who was considering taking, as an extra course, the one on mathematical statistics taught by the actuarial science faculty. Thanks to a chance encounter with Dr Warren, Bragg not only enrolled in the course but also was drafted into the entire program. “One day I happened to see Dr. Warren walking down the front steps of the Arts Building. On a sudden whim, I stopped him to ask about that statistics course. Within two minutes I had been recruited for life in the actuarial profession. He dropped everything else. We walked back up the steps and went into his

lecturer with a two-day workweek. Said Bragg: “The most significant classes were for actuarial students proper: life contingencies and mortality table construction.”¹⁰ Today, he is considered a global expert on the last subject.

After his short-lived teaching career, Bragg went on to actuarial stardom. Following eleven years with Great-West Life, he became President of the Life Insurance Company of Georgia in 1975. In 1978, he established Bragg and Associates, his own actuarial consulting firm that produced, and still does, highly successful



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office. Five minutes later he was calling the Registrar to change my courses over to the Actuarial Science track.”⁸ In the 1942-1943 Session, Bragg served as a part-time assistant and taught in that under-equipped statistics laboratory. Typically, fifty students were involved as the Statistics Lab was a mandatory course. Recalls Bragg: “There would be exercises, such as working out standard deviations or correlation co-efficients. But I would try to throw in some more interesting stuff, such as the possibilities of winning at crap games or at Banko, which was a version of Blackjack.”⁹

Warren recruited Bragg’s help again between 1945-47 as a part-time

actuarial products such as the Bragg Life Tables.

Before all that happened, back in Bragg’s student days, there was “an urgent need for several scholarships to enable deserving students...to take honors courses in Actuarial Science,” lamented Warren in his report of 21st April 1943, that being the “only channel through which students at the University of Manitoba can secure instruction in actuarial science.” It was a two-part concern. On the one hand, there was a need for scholarships; there was only one in place. On the other hand, Warren dusted off his disappointment – expressed to Senate on October 7, 1937 and





in his 1940 and 1943 reports – with the gradual movement to consolidate the study of actuarial science in the Commerce program and the reduction of such courses in Arts and Science. If Warren had his way, he’d have it both ways. *Finite Differences* for all! On the plus side, his call for student aid had not gone unheard.

In the 1938-1939 session, a scholarship in actuarial science, with an annual value of \$100, was established by Conrad Orloff, BA (Hons)/29, Actuarial Consultant with Marsh and McLennan, Insurance Brokers, Chicago. In his report of 10th April 1940, Warren said, “It is indeed gratifying that one of our recent graduates should exhibit in so tangible a form his continued interest in the University, and his appreciation of the benefits he received at the University. For the 1939-1940 session this scholarship is to be awarded to the student taking the Actuarial Science Option and ranking highest on the work

of the fourth year in Commerce.” The first recipient was Meno T. Lake, BComm/40, who went on to become the CEO of Occidental (now Transamerica), a large life insurer in Los Angeles.

The terms of the scholarship were altered slightly in subsequent years, but the scholarship itself was withdrawn in 1943 upon Mr. Orloff’s enlistment in the American Navy. There is no record of it being reinstated. Others, however, stepped into the breach.

In 1944, Morris Neaman initiated a \$125 prize available for students in the third year of the Actuarial Science course. Neaman, who while not a graduate of the University, was a successful, community-minded member of Winnipeg’s garment industry, President of Neaman Furs Ltd. and the Sterling Cloak Co. Ltd. (*He also served as Honorary President of the Commerce Students’ Association in 1962-63.*)

Originally, actuarial science courses were taught on the University’s Broadway Campus near the Legislative Building in downtown Winnipeg. While it is unlikely that such courses were taught in this Science Lab (circa 1912), an often critical shortage of classroom space may have dictated otherwise.

(Archives and Special Collections, University of Manitoba.)



The first building constructed on the University of Manitoba's Broadway Campus, 1901.

(Archives and Special Collections, University of Manitoba, #PC 80-312-11)

In his report of 4th May 1948, Warren expressed his “deep appreciation” to the Kemper Casualty Insurance Companies of Chicago for establishing a Kemper Scholarship at the University of \$700 a year for five years. In the same report, what seemed to have pleased and impressed him more, however, was the generosity of graduates. “It was indeed most gratifying to learn that last autumn the Actuarial Alumni of the University had undertaken to contribute at least \$2,500 for the establishment of Actuarial Alumni Bursaries to be awarded to ‘worthy and needy’ students in the course. I appreciate deeply the feelings of loyalty and appreciation which prompted this action. These bursaries fill a real need.”

At the student level, the Departments of Commerce and Actuarial Science established a mechanism through which students could be put in touch with prospective employers. This was the forerunner of a placement service, which

has become the School's Career Development Centre.

On December 5, 1941, two days before Pearl Harbour, the Actuarial Club held its first general meeting. Fred Tallman, BComm (Hons)/43, was elected chairman, Jack Bragg, vice-chair and John Amsden BA(Hons)/47, Secretary-Treasurer. Warren accepted the position of Honorary President. The Club was a student initiative to acquaint students with practical actuarial work. In 1944, the Club arranged for speakers from the industry and a tour of the head office of The Great-West Life Assurance Company. Bragg recalls that it also held study groups for specific actuarial exams. *(In future years, the Club would play an important marketing and recruitment role for the actuarial program and introduce its annual Fish Dinner, an enduring networking event designed to bring together local actuarial students and practising actuaries from across North America. It is believed that the first such eat-and-meet event was held in 1961 at Winnipeg's Shanghai Restaurant.)*

In 1917, Warren chaired a Committee of University Faculty on Pension Schemes. The Minutes of its first meeting, held February 18, 1918, state that each person on the five-member committee was assigned one or two pension plans to investigate and to digest “the material obtained for presentation to the Committee.” Plans under consideration included those of the Manitoba Civil Service and the Manitoba Agricultural College. Warren was to study and digest the old and new pension schemes of the Carnegie Foundation for the Advancement of Teaching. There is no record

known if Warren was a member of that committee.)

Warren may have had further professional involvement in the Plan over the years, but he certainly was involved on a personal level as he contributed to it financially for the twenty-two years between its inception and his retirement. He reaped little reward in return. He retired in the spring of 1949 and died on October 7th later that year.

His leadership, popularity, vision, and dedication left an indelible legacy that was considerable and significant – full of firsts; many beginnings – and brought

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of further committee meetings or what further role Warren may have played. But, given that the University approved its first pension plan on December 1, 1927 – with an \$80,000 bequest from the Carnegie Foundation – suggests that Warren’s findings were positive and played an important, influential role in the decision-making process. *(The report, recommending the Carnegie plan, was presented to the University’s Board of Governors by Dr. R.C. Wallace – a geologist after whom the University’s Wallace Building is named – on behalf of the Committee of University Faculties on Retiring Allowances. It is not*

international recognition and acclaim to the Department and the University. J.A. Mills, a spokesman for the Kemper organization of Chicago, the firm that had recently established the five-year scholarship, said, “no school in America has equaled Manitoba’s record in training prospective actuaries in the field of mathematics.”¹¹

The Warren Memorial Scholarship was established in 1952 to honour Dr. Warren. Alumni redirected their support from their bursary program to the Warren scholarship.

Leland (Lee) F. S. Ritcey, who had joined the Department in August of 1947, succeeded him.



3

Part 3:

The Ritcey Era 1949-1958



Leland Ritcey was born in Riverport, Nova Scotia, where he received his public and high school education. He received his Bachelor's degree at Mount Allison, his Master's at Harvard, and his PhD in 1945 from the University of Chicago, as had Lloyd Warren.

Following his term at Manitoba, Ritcey became Executive Director of the Canadian Mathematical Congress in 1958 and held that position for eight years. In 1969, he received an honorary degree from the University of Winnipeg – where he had taught mathematics from 1931 to 1947 – at which time he was Professor of Mathematics and the first Richter Memorial Chair of Actuarial Mathematics at the University of Western Ontario. *(The University of Winnipeg does not have a copy of the citation on Dr. Ritcey that was delivered at the convocation ceremony at which he was honoured. Presumably, the honorary degree, Doctor of Laws, was to recognize his contributions to mathematics both on and off its campus.)*

Like his predecessor, Ritcey was required to submit an annual report. Unlike his predecessor, who seemed to relish the opportunity to generously share the annual highs and woes of the Department, Ritcey's reports are noted for their brevity: his 1951-52 report, for example, is seven lines long, a total of ninety-three words. But there was a reason for this: he was no longer the sole scribe. He had



Leland Ritcey

(Brown and Gold, 1956, Archives and Special Collections, University of Manitoba.)

superiors who also had actuarial things to say on occasion and who might have preferred that he take a back seat on the subject. They were Dr. J.B. Rollit, the Director of the School of Commerce, whose reports are as ample as Ritcey's were not, and, Dr. W.J. Waines, the Dean of the Faculty of Arts and Science, as the School came under his administrative umbrella.


Beginning in September 1950, and prior to a move to the Arts Building later in the decade and the opening of the Isbister Building in 1960, the School and the Department were physically amalgamated and peacefully coexisted on the third and fourth floors of

(far left) The University's iconic Administration Building.


the University's Administration Building, in space vacated by Home Economics, known today as the Faculty of Human Ecology. Most of the classes were held in rooms on the fourth floor. This benign relationship would be tested in the late 1980s and early 1990s when the Department was seen, by some, as the dysfunctional member of a modern business-school family, the unwanted stepchild available for adoption.

Also in 1950, on March 29, the Department changed its name. "To accord more recognition to the courses offered in Statistics,

In anticipation of "annual increments in registration in the future" and "in order to obtain a clearer picture of what is likely to happen over the next ten to fifteen years," Dean Waines asked Ritcey and colleague Geoffrey Crofts (BComm(Hons)/46) to do a projection of the University's future "population", not just that of the Faculty of Arts and Science. Waines reported on the outcome of the study in his 1953-54 report and the "tentative projection based on births for the years 1937-53 and school registration in the Province for 1944-53." Waines cautions that the projection is "tentative" and



In 1958, the "pattern program of studies at the undergraduate level was introduced which gave further recognition to the nature of the curricula offered by the School of Commerce."



the name of the Department of Actuarial Science was changed to the Department of Actuarial Mathematics and Statistics."¹²

This was the first of five facelifts the Department would undergo before becoming the Warren Centre for Actuarial Studies and Research in 1994.

Ritcey was proud to announce an important first in his 1951-52 report. "The first candidate for a higher degree and majoring in Actuarial Mathematics received the degree of Master of Arts this year." That person was Emeterio Roa, MA/52, who had received his BSc from Michigan in 1950.

"should be checked from year to year to determine whether or not the assumptions underlying it are correct."

To cite one example, the Ritcey/Crofts projection suggested that "by 1970 registration will be approaching a figure double that of 1953." To underscore that surely daunting possibility, Waines concludes with this qualifier:

"It is believed these estimates are conservative." They were. The actual 1953 full-time enrolment figure was 3225, the 1970 Ritcey/Crofts prediction was 5697, but the actual 1970 enrolment was 11,338. *(Keep in mind the University was a completely different place in*



1970: part-time students were a considerable presence; there were now twenty-four faculties/schools compared to sixteen in 1953; and, it was an era where a university education was seen by many as something of a Divine Right, whether or not they could read or write. University President, Dr. H.H. Saunderson would put it more politely when he said in his 1959-60 Report: “the rapid increase in student numbers must be due to a steadily higher fraction of young people desiring university education.”)

In 1958, the “pattern program of studies at the undergraduate level was introduced which gave further recognition to the nature of the curricula offered by the School of Commerce.”¹³ With this change, six distinct “patterns” of study,

or majors, were offered. Actuarial was one. The others were Statistics, Administration and Operations, Behavioral Studies, Public Policy, and Accounting.

With the departure of Rollit in 1955, to return to an executive post with the Canadian Pacific Railway, Ritcey was named Acting Director of the School until he resigned, in 1958, to take a position with the Canadian Mathematical Congress. “Ritcey taught many of the Commerce courses, and was a good prof., but quite reserved,” recalls Don Gauer, BComm(Hons)/54. “I think he was happier when he became head of the Mathematical Congress.”

Ritcey was succeeded by Ernst Richard “Ernie” Vogt.

The upper reaches of the Administrative Building once offered classroom space for actuarial science courses.

(Archives and Special Collections, University of Manitoba, PC80-141-1.)

4

Part 4:

The Vogt Era 1958-1991



It is unfortunate that this history project did not start before 2008, because Ernie Vogt passed away in January 2008. He was one who really knew the history of the department.” So wrote Elias Shiu, himself a student of the program and Acting Head of the Department in 1985-1986.¹⁵

Ernie Vogt was a product of the actuarial program. A native of Steinbach, Manitoba, he farmed after high school before acting on a cousin’s advice to pursue an actuarial career. He was a student toward the end of the Warren era – Warren told him his “performance was not good enough”¹⁶ – but mainly in the Ritcey one. Contrary to Warren’s assessment, or maybe with the help of Warren’s paternalistic shepherding skills, Vogt graduated in 1951 with a BComm(Hons). At one point, he worked for Manufacturers Life in Toronto, along with fellow alumnus Syd Jackson, before returning in 1958 as Associate Professor and Head of the Department of Actuarial Mathematics and Statistics. He became a Fellow of the Society of Actuaries in 1960. Between 1958 and 1991, the year he retired, he served as Department Head on three different occasions: 1958-1974; 1981-1983; 1988-1991.

Like his predecessors, he filed annual reports. They document years of “progress, promise, and problems.”¹⁷ Student enrolment rose considerably. Resources became strained. The Department, along with the School, moved into new space that had a positive



Ernie Vogt

impact. A happy camper, Vogt noted in his 1960-1961 report that, “The Department moved into splendid new quarters in the new Isbister Building last October. Each staff member is now housed in an individual office, designed to fit our specialized needs, and we now have two fully equipped, statistical laboratories, an elementary laboratory and an advanced laboratory, serving our needs well.” It was a short-lived respite from crowded conditions.

Six years later, Vogt found himself chairing a Building Committee to determine the space needed to accommodate a growing undergraduate and graduate

The School of Commerce Reading Room in the new Isbister Building
(Brown and Gold, 1963, Archives and Special Collections, University of Manitoba.)

Her Majesty, Queen Elizabeth II, on October 6, 1984, turns the sod for the Drake Centre in the company of University dignitaries (l to r) Drs. Ed Tyrchniewicz, Arnold Naimark and A.M. (Mac) Runciman.

(Archives and Special Collections, University of Manitoba, PC80-200-9.)



population and an increase in faculty members. The report was submitted to the Dean of Arts in 1967 for his consideration. Eventually this led to the School's "temporary" relocation "*for two years only*"¹⁸ to the subterranean splendour of an addition to the Frank Kennedy Centre in March 1971. The addition, affectionately dubbed the "Commerce Annex," and now the Extended Education Complex, would be the last stop before the School ended its nomadic life – *fifteen years later* – with the opening of its own building, the Drake Centre, in 1987.

The Actuarial Club was active in 1958-59. It developed a marketing program to introduce actuarial

science to students with the top marks on the annual Grade XI Mathematical Contest (sponsored by the Canadian Mathematical Congress and administered by the Department of Mathematics at the University). Vogt reports, however, that the Club was "revived" in 1960-61 but gives no reason for the need to resuscitate.

In his first annual report (1958-1959), Vogt introduced what appears to be a growing role for the Department, that of providing a consulting service to meet the "increasing demand" for such expertise by other University units. His reports show several examples. To cite one, he "was active as an actuarial consultant to the University Administration and

Staff Association and, together with Professor Paul, completed a study of grades for the Registrar.”¹⁹ (Dr. G.I. Paul was Head of Statistics.)

Vogt also played an important role in the early days of the Manitoba Pension Commission. He was its first Chair and did some pioneer work in that capacity. Legislation required that the Commission receive and interpret actuarial reports on the valuation of each plan, to see what the reports indicated about the financial condition of each plan, and whether the valuations themselves had been done in accordance with the legislation. Not being a pension specialist, Vogt formed an actuarial advisory committee composed of pension actuaries in the City to help him review the plans as required by law and set out some guidelines so Commission staff could eventually assume the function.

In his 1962-1963 report, Vogt is pleased to note that three students had enrolled in the Department’s first Master’s program. They would graduate in 1963 with Master of Science degrees in Statistics. They were: Charles Goldsmith, BSc/61, Brian Macpherson, BSc/60 and Hendrik Rautenbach, BComm(Hons)/59. While the courses were taught by the Actuarial Department, the degree was offered through the Faculty of Arts and Science and could either be a MA or MSc degree, presumably depending on the student’s academic background and educational goals. The Master’s program had been introduced to allow students to take further actuarial courses,

a more specialized instruction, so that they could write the exams for professional designation. The same was done in Accounting.

(The Master’s program would be discontinued in the 1990s largely because of the foregoing separation of duties. Not being taught and offered by the same source contravened the regulations of the Association to Advance Collegiate Schools of Business (AACSB) and therefore jeopardized the School’s AACSB accreditation, “the hallmark of excellence in management education,” and thus an important seal of approval, one that was critical to achieving the goals of the School at that time. Looked at more closely, the Master’s program had additional problems. It had one of the lowest completion rates at the University. Students would take the courses they wanted, drop out, and not complete the degree. This was not really beneficial to the School in terms of resources. The graduate courses also suffered from low enrolment.

The Master’s program was axed in the 1990s, along with the ones in Accounting and Management Science. All were low enrolment courses and therefore deemed impediments to accreditation. When finally accredited, Manitoba became the fourth business school in Canada with an AACSB designation. The undergraduate program in actuarial science was never an accreditation issue because it was simply a major within the School.)



The Drake Centre facing southeast and the Red River.

(Judy Wilson)

The offering of two actuarial degrees in two different faculties is an historical peculiarity that continues today. It began with the introduction of the Bachelor of Commerce degree in 1949 and the simultaneous continuation of the Bachelor of Arts (Honours) degree in actuarial science. Although originally an Arts degree, actuarial science became a Science degree when the Faculty of Arts and Science was split in two in 1970. Humanities stayed with Arts; sciences were transferred to Science. Unusual as this structure may be, it appeals to two different markets. Science students, keen to become actuaries but with no interest in or aptitude for business courses, could therefore bypass them. On the other hand, actuarial students in the Commerce program could

sidestep cluttering their course loads with test tubes and beakers. Within the School, it was not a question of two solitudes between actuarial and commerce students, but a form of one-way integration: the actuarial students took Commerce courses but not the other way around. Of course, Commerce students were free to do so but few did as they did not see a benefit for their career aspirations.

All did not seem to augur well in 1966-1967. Vogt's report begins: "This the final annual report of the Department of Actuarial Mathematics and Statistics." It was not to be read as a death knell; it simply signified a new division of labours. In May of 1967, Senate approved a recommendation to

subdivide the Department: Statistics would go to the Department of Mathematics in the Faculty of Arts and Science; the actuarial program would stay where it was but the Department would be known as the Department of Actuarial Mathematics. This was a natural move. According to Dean Emeritus, Dr. John Mundie “Statistics courses were taught to students in several faculties and schools as well as to those in Commerce. Those who taught the courses were more closely allied with their colleagues in mathematics departments.”²⁰

According to Vogt’s daughter Lori, “I was told by one of dad’s

program. Among other actuarial endeavours, he also helped establish and teach the actuarial program at the University of Waterloo. Vogt was active in the profession and a frequent and popular speaker at actuarial meetings. He was a highly respected teacher. He obviously taught a lot of students and his students thought a lot of him. They appreciated his “quick wit, sound advice and helpful manner”²² and have no difficulty expressing their admiration and respect for him.

“He taught material so thoroughly and understandably. He was one of the two best profs I ever had in my six years at University,”²³ recalls

... it is impossible to quantify but Vogt’s influence was substantial. He was a faculty member for thirty-four years during which time the student population at the University ballooned.

colleagues at his funeral that he had educated about 80% of the practicing actuaries in North America at some point through his teaching, conferences and setting up of programs and courses.”²¹ This is more a term of endearment than a statement of fact. To be sure, it is impossible to quantify but Vogt’s influence was substantial. He was a faculty member for thirty-four years during which time the student population at the University ballooned. He recruited competent academics to the Department, some of whom were internationally recognized scholars and whose presence on staff enhanced the reputation of the

Michael Byrne, BA (Hons)/63, more of whom appears later in this history. “In addition to being my favourite instructor, Professor Vogt was extremely influential in my graduation and professional career,” said Glen Middleton, BComm(Hons)/80.²⁴ “Ernie Vogt took it as a personal mission that we all got through,” says Bill McCallum, BComm/ 64.²⁵ It was as if Vogt was a graduate of the Lloyd Warren School of Teaching. He also, like Warren, maintained a regular communications with his “boys” and, in the true spirit of inclusive alumni relations, with those of his predecessors.

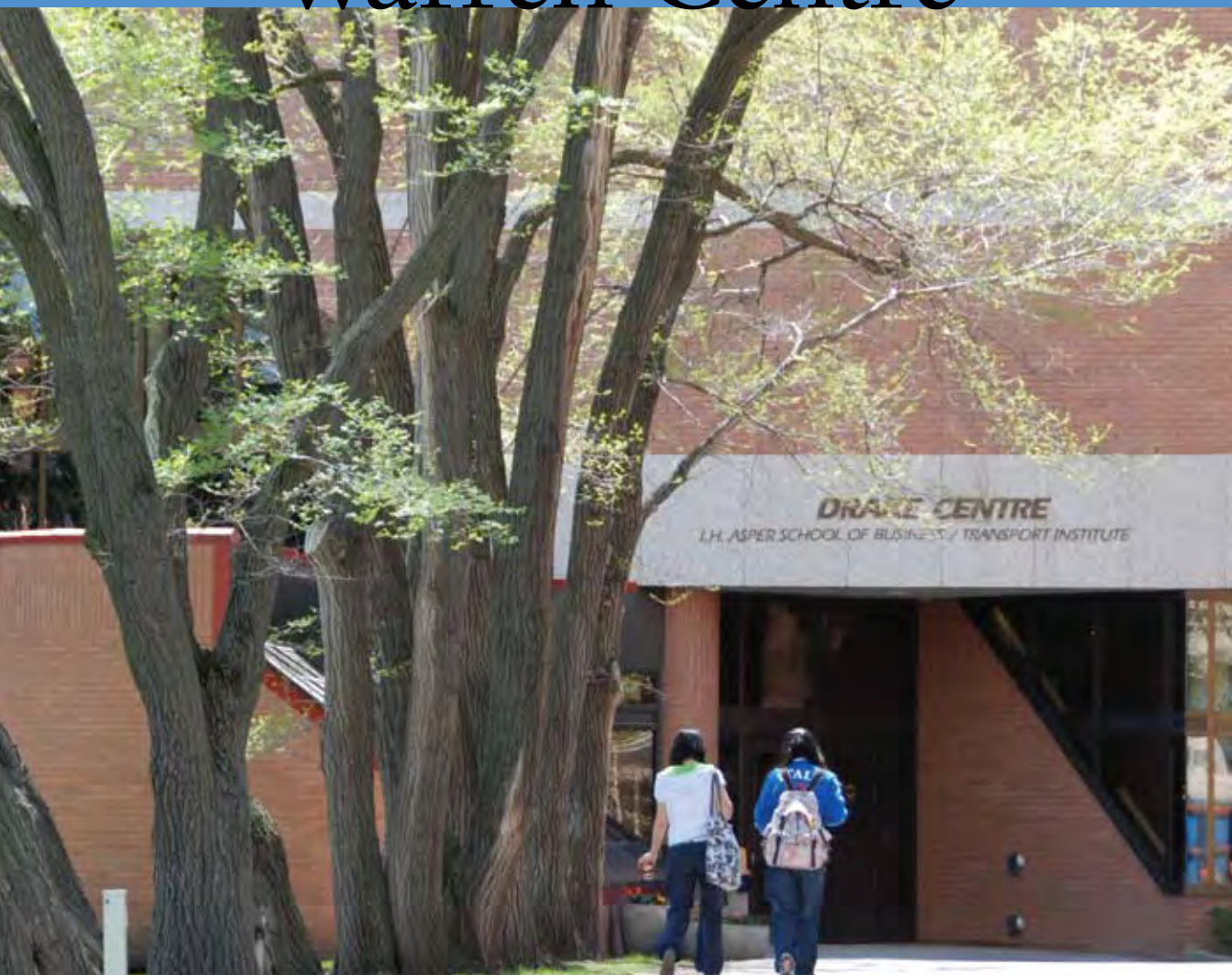


$$(I^{(p)}_s)_{n|i}^{(p)} = (1 + i)$$

5

Part 5:

The Warren Chair and the Warren Centre



If Lloyd Warren was the founding father of the U of M Actuarial program, Ernie Vogt must be considered the godfather of the modern program (circa 1960-1990),”²⁶ said Jerry Gray, Dean Emeritus and Senior Scholar of the Asper School of Business.

As the Defender of the Faith in *Finite Differences*, Ernie Vogt protected the program from those who vociferously questioned its worth and relevance in the School. Even when not Department Head, he stood his ground even though he and his colleagues were not seen as team players by some for not identifying with the goals of the School, for not buying into its big picture. He also created “the perception that the insurance industry would withdraw its support from the Faculty if his department was hurt in any way.”²⁷ While the Department was indeed hurt in many ways in the years ahead, Vogt’s protective stance and his solid belief in the actuarial program were, in good measure, what helped it survive some very tough times that began in the 1960s and ended in 1993. (The insurance industry did not turn a blind eye to what was going on.) We begin with a look outside the box and the continuing shift in demands placed on business schools as to what they should be and offer.

Beginning in the early 1960s, business schools were under pressure to justify their existence as academic programs. There was an absence of research, a core function of an academic unit, as well as faculty members with PhDs;

in most situations, an MBA or a professional designation were the educational prerequisites to teach in a business school. Until 1967, John Mundie, BComm/54, PhD, was the only member of the School’s faculty with a doctoral degree. During his term as Dean (1968-1981), Mundie set about to improve the ratio and to begin moving the School toward becoming an academic unit that was equally focused on teaching and research.



John Mundie
(above and far left,
Judy Wilson)

Business schools were also criticized for not being scientific enough. In response to a report in the late 1960s that laid such a charge, business schools across the country went scientific. In the 1970s, business schools introduced more quantitative requirements that were

best met by students with strong mathematical skills, even if their major had no quantitative focus. Manitoba followed suit.

Then, in the 1980s, there was yet another distinct flip-flop in focus of what constituted a cutting-edge business school. The quantitative approach to business, and its heavy emphasis on the scientific, was now as old as yesterday's newspaper. It was pilloried for producing graduates who were too narrowly educated, who had little appreciation for the role of business in the broader society and who were under-exposed to a liberal arts education. The new, national trend in the 1980s was to make business schools less scientific by offering a broader business education.

What impact did this new philosophy have on the Actuarial Department and the program? In 1970, the Department changed its name to the Department of Actuarial and Business Mathematics, as it had taken on more non-actuarial disciplines starting with Operational Research. Again, in 1982, the name was changed to the Department of Actuarial and Management Sciences when Production and Operations Management joined. These additions were “a natural fit as they were applied mathematics-based disciplines and those who taught these courses had a quantitative background that complemented those teaching actuarial courses,” states John Mundie. “I don't think this detracted from what the Department was offering to its actuarial students.”²⁸

By the mid-1980s, however, the majority of courses offered by the Department were non-actuarial, and the actuarial faculty were minority members of the Department's staff complement. As a consequence, the role of the Actuarial Department had increased, because it had acquired new disciplines, while that of the actuarial program had not. It now shared space with other disciplines in a department it once called its own. The Department and the program were no longer one and the same. By that same period, “The complete actuarial curriculum – undergraduate and graduate – was offered by about three full-time faculty members and a part-time lecturer or two.”²⁹ Many were low-enrolment courses and, in the context of the severe financial reductions facing the entire School in the 1980s, they became prime targets, high on a hit list for elimination, because there were too many dollars required to support too few students. Deans, desperate to find any way they could to balance their books, would lean in favour of supporting or protecting those courses students wanted, that is, those with a higher demand and a correspondingly larger enrolment. For a dean, to use a hypothetical example, the choice between cutting an accounting position or an actuarial one would have been obvious.

The actuarial program's traditional small enrolment was not the only strike against it; its other liability was its traditional presence, since 1949, in the business school. Two deans, Roland Grandpré and William Mackness, did not see that

as a good fit; they gave the actuarial program a low priority in the type of business schools they tried to build.

Roland Grandpré, who was Dean (1981-1987) during the restrictive period of budget reductions previously mentioned, brought a strong external focus to the School. Having been the Director of the Manitoba Institute of Management, he was familiar with the University and the School, but he was unfamiliar with having an actuarial program in a business school. He set out to achieve three objectives. He wanted a new

Grandpré's goal to gain the support of the business community.

All of the above seemed to have a considerable impact upon the actuarial program. The questions were raised: "Should the actuarial program continue to play a significant role?"³² Was it the "best use of available resources?"³³ Was its role "significant" or marginal at best? If it were to continue to play a role, could it be played in a different way, through a different structure, or even elsewhere rather than in the School? The questions imply that the program was at least under review if not under the gun.

It concluded that the best way to realize that would be to establish an endowment fund that would support a chair in Actuarial Science, the position to be funded by the insurance industry and actuarial alumni.

building for the School. He wanted to cultivate the business community. ("You cannot have an outstanding business school without the support of the business community" was his motto.)³⁰ He wanted to revise the curriculum to provide a "broader business education" – and reduce the opportunities for specialization – "with a view to improving the quality of the Degree and making the best possible use of available resources."³¹ In a Faculty whose roots were in specialized functions, this was no small task to effect. In a Faculty under considerable financial pressure as referenced earlier, difficult choices had to be made, and ones that could have neutered

Grandpré made it judiciously known that the actuarial program was threatened, that unless he found external support to keep it alive, it may have to go in order to achieve a balanced budget. He shared this grave situation with Kevin Kavanagh, BComm/53, the President of Great-West Life. Kavanagh readily understood and appreciated the program's heritage and respected reputation. He was on a first-name basis with many of the captains of industry it had produced. His company, an industry giant, had, for generations, seen the program as its principal source of actuarial talent. It would prefer not to have to look elsewhere. There



was much at stake, a potential and considerable loss in the making both for the profession and the University.

A working group was established in 1986, consisting of University representatives and practicing actuaries, and charged with investigating various ways to ensure the continuation of a viable actuarial program at the University. It concluded that the best way to realize that would be to establish an endowment fund that would support a Chair in Actuarial Science, the position to be funded by the insurance industry and actuarial alumni. (The Chair was to be established in 1987, to coincide with the Actuarial Department's 50th anniversary, and would be known as the Dr. L.A.H. Warren Chair in Actuarial Science.) A campaign was developed to raise \$1.2 million on the condition that the Faculty guarantee to fund three actuarial positions. Some faculty members balked at the condition, seeing it as a lifetime commitment of scarce or uncertain future funds that could be better spent. Grandpré would have appreciated that position but he agreed to the guarantee for what he saw as the greater good: it smoothed relations with and won the support of an important segment of the business community. It also secured the program.

For reasons stated earlier, Great-West Life rose to the challenge and undertook a leadership role in the cause. It generously pledged to match the "contributions of all other Canadian life companies to a maximum of \$400,000."³⁴

The insurance industry followed the leader. As of December 1988, over thirty firms had contributed between \$1,000 to \$50,000 to the cause, for a total approaching \$356,000. Alumni came through too with contributions exceeding \$110,000. Along with interest earned, matching gifts and some non-industry contributions, the goal was reached.

From 1989 to 1991, the Fund was used to sponsor a series of Warren Chair Visiting Professors, as the principal was not large enough to generate a sufficient return to support a full-time, salaried position. The high-calibre visitors were of international stature. They were: Hans Gerber, an actuarial professor at the University of Lausanne,



Switzerland, noted for his research papers on risk theory and insurance economics; Hans Buhlmann, of Zurich, President of the Swiss Federal Institute of Technology (Albert Einstein's alma mater); James Hickman, considered at the time to be the leading actuarial academic in North America, and Dean of the Business School at the University of Wisconsin, Madison; and, Dr. Freddy Delbaen, Professor Emeritus, Department of Mathematics, Swiss Federal Institute of Technology, Zurich. *(Dr. Samuel H. Cox, a respected actuarial scholar from Georgia State University, served as a Visiting Professor in 2005 and liked the experience, particularly working with his department colleagues. Taking advantage of his eligibility for early retirement in 2007, Cox*

applied for and was appointed Warren Chair on July 1 of that year.) These original four visitors were meant to help enhance the prestige and profile of the actuarial program at the University and to expose the actuarial faculty and students to some of the world's leading actuarial scholars. Still, it was a stop-gap measure, predicated on the expectation that the appointment of the first Chair would be in the 1991-92 academic year.

With the arrival of William Mackness, who was Dean from 1988-1995, the actuarial program appeared in good shape, at least on paper. There was \$1.2 million in the bank to finance a Chair. There was guaranteed funding of three actuarial positions. Appearances were deceiving.



Mackness was a business economist by profession. Mackness, like Grandpré, questioned the role of the actuarial program in a business school, but for different reasons and with a much different style. In his vigorous and forthright pursuit to make Manitoba's business school one of the top five in Canada, Mackness created the Faculty Development Plan 1990-1994, released in March 1989. It was the cornerstone of his vision. Many saw it as a brilliant piece of strategy.

In the Plan, actuarial science got scant reference, eight lines out of a thirty-four page document. The emphasis was placed on students and the mainline disciplines of finance, accounting, marketing, and business administration, all at the expense of actuarial science. The actuarial program therefore became further downgraded, put on a back burner because it was out of sync with the new vision. It was quarantined for being too quantitative. The Department felt devalued, demoralized, relegated to second-class status and threatened. To department members, the Plan was further evidence of the erosion of the actuarial program within the Faculty; they asked that it be rewritten to give the program fair and equal treatment. Finally, after years of getting no where but frustrated, the Department wanted out. On February 13, 1992, the Department voted unanimously to vacate the premises and move to the Department of Statistics. While Mackness might surely have been first in line to help them pack, the

University stifled the move; being disgruntled was no grounds for a move and there was no compelling academic reason to relocate. Furthermore, the University asked the parties to settle their differences. They didn't.

Mackness joined the board of Great-West Life in 1988 where he saw many graduates of the actuarial program and the School in leadership positions of an international powerhouse. While this surely gave him a greater personal appreciation and understanding of the roles of actuaries in business, it did not soften his view on the program itself. To Mackness, the program was not relevant to his vision of a business school. He was a man of firm resolve who believed his positions to be right. Furthermore, he loathed the guarantee of three positions which he saw as a frustrating, irritating encumbrance. In the best of all possible worlds, he would have preferred to have nothing to do with the actuarial program. And apparently he tried. At one point, say some, he offered the program and the Chair to the Faculty of Science, the School's long-term actuarial partner. For whatever reasons, it was an offer that Science refused.

Within two years after the departure of the last visiting professor, the industry was beginning to express concern over the failure to fill the Chair. Unless this was done soon – the date of the 1994 academic year was suggested – consideration might have to be given to moving the Warren Chair to another institution which, under the donor

agreement, the industry had the right to do. Surely the working conditions were an impediment. Yes, as Chair, you got a private office with a river view, but on the downside, faculty and student numbers were low, as was morale. Industry relations existed, in name only. Overriding those negatives, and surely influencing them, was the environment within the School generated by the friction between the Dean and the Department and their steadfast, widely divergent views – polar opposites – on the actuarial program and its future within the Faculty. Still raging and unresolved internally, the issue moved to a higher court, the University’s Board of Governors.

The day after its meeting on December 9, 1993, the Board of Governors sent the Dean a diplomatic, yet crisply worded, three-page letter that rendered its non-negotiable decisions. At times, it read like a set of commandments. It had given “careful consideration to the issue of the redevelopment of Actuarial Sciences... and options for pursuing that redevelopment, including those presented by the Dean of the Faculty of Management and the Provost and by the ad hoc Committee of the Faculty as endorsed by the Faculty Council.” The Board had decided the program would stay where it was. (There would be no more shopping it around.) The letter outlined the reasons for this decision and the urgency to take steps to rebuild and revitalize the program. Furthermore, the Board endorsed the University President’s proposed administrative structure

for the program by authorizing the establishment, within the Faculty, of a centre for actuarial studies and research. Leaving nothing to chance, it dictated that it would be known as the Warren Centre for Actuarial Studies and Research. (Basically the Centre would operate like any other department within the Faculty except that it had the unique guarantee of three, funded positions.)

Mackness achieved notable successes in many areas, few of which came easily. He had tremendous student support. They embraced his Development Plan as students were a principal beneficiary of its vision through a variety of enhanced student services. They voted seventy-eight per cent in favour of his proposed tuition fee increase because of the return it would bring them. He cleaned house. He eliminated low-enrolment courses and purged the place of professors whose performances in the classroom were found to be poor. He established the position of Executive-in-Residence in 1991 with Kevin Kavanagh as the first appointment. The position was designed to be another link between the School and the business community.

Overall, however, the Mackness era was tainted by a litany of “many formal grievances, lawsuits, votes of non-confidence and a general climate of conflict and unrest”³⁵ within the Faculty and the business community. This took its toll. Two highly respected actuarial faculty members resigned. No discernable movement was made on finding a Warren Chair. Membership in

the Associates, a much-admired Grandpré brainchild introduced in 1983 and designed to garner corporate support for the School, plummeted; by 1997, it was at 100, half of what it had been. The Associates had backed his bid for a second term as Dean. The exodus in membership was, in part, a protest against the University for not giving him one. But it was also an expression of weariness over his endless legal battles and in reaction to a letter he mailed to 8,000 alumni protesting how he was being treated. The University billed him for the cost.

With controversies outweighing contributions, however, Mackness's contract was not renewed. He then ran for political office. He was the Progressive Conservative candidate in Winnipeg South – the University's federal constituency – in the 1997 federal election. He came last, beaten by the incumbent, Liberal Reg Alcock who, in 2006, became Executive-in-Residence at the Asper School.

Following the end of Mackness's term in mid-1995 and a six-month, cooling-off period under the calming influence of Interim Dean, Dr. Terry Hogan (July-December 1995), Dr. Jerry Gray began a three-year term as Interim Dean in January 1996 before accepting a full appointment in 1999. One of his earliest acts was to address and resolve the Chair issue. He held several meetings with the Warren Chair Committee, a body made up of the University President, the Dean of the School, and two insurance industry representatives, with the oversight

for the Chair and the management and use of the endowment fund. One interim position begat another; the Committee approved a short-term measure.

Ideally, the Chair was seen as “an actuarial educator and researcher whose business research and publication are widely recognized.”³⁶ The ideal occupant would also “provide leadership in the areas of research and collaboration with industry and government.”³⁷ The first person to actually hold the Chair was not appointed until January 1997 – a decade after the Chair was established and a little more than three years after the Board of Governor's landmark decision – and then only on a part-time basis. He was neither an “actuarial educator nor researcher.” He had no PhD or Master's.

Michael Byrne, however, was a graduate of the actuarial program, a very experienced practising actuary, and a former senior executive with Monarch Life, North American Life, and Manulife Financial. Byrne was recruited specifically “to help rebuild what had become a dwindling entity.”³⁸ It was a marketing challenge. Students had to be recruited. Relationships needed to be restored and new ones cultivated.

Total enrolment had shrunk to about fifty-five, all years combined. As well, the Department was no longer on most employers' radar screens as a supplier of top actuarial graduates. Before, employers beat a path to the Department's door; now, the carpet was no longer threadbare. The number of employers visiting the campus

to interview graduating students or those for summer positions had “fallen to five or six a year.”³⁹ By the time Byrne’s term ended, enrolment was about 150 and climbing and the number of visiting employers was nudging twenty-five.

These were the end results of a three-part plan:

- i) working more closely with high school calculus teachers and guidance counselors to encourage them to raise awareness of the actuarial program among their top mathematics students;
- ii) with the strong administrative support of the Asper School’s Career Development Centre, repeatedly canvassing prospective employers to ensure that they were aware of the existence of the program and of the quality of its graduates who, says Byrne “had completed significantly more professional examinations than the students they’d traditionally been hiring;”⁴⁰ and finally,
- iii) the promotion of the program by Dr. Jeffrey Pai among various universities in China, Taiwan, and Thailand through a series of “seminars, short courses and research presentations.”

(Pai, a native of Taiwan with a PhD in Statistics and a Master’s in Actuarial Science, both from the University of Connecticut, joined the Warren Centre in 1996 and became its Director in 2009.) With mission accomplished, Byrne left the Warren Centre in 2004.

To ward off a return to pre-Byrne conditions, permanent, pro-active mechanisms were formalized to recruit top students to the program and to ensure that its profile remained high among current and

prospective employers. Now, with the assistance of the Dean’s Office Marketing and Communications Department, senior students from the Actuarial Club make presentations on the profession to graduating calculus students at Winnipeg high schools and to those enrolled in University 1 and in first and second year Science. As well, members disseminate information – pens, bookmarks, brochures – on the program at University Information Days, an event that brings busloads of high school student to the campus to



learn more about prospective careers. On the business side, the Club prepares student resumes and sends them to employers that have hired Manitoba graduates in the past or to those that are good prospects to do so. Not to be forgotten is the annual Fish Dinner, the value of which has been previously mentioned. To help prepare students for job hunting, the Career Development Centre helps with resume writing and holds seminars on the interview process. And Centre staff work closely with employers, prospective or perennial, to facilitate their recruitment visits on campus.

Prior to graduating in 2010 and 2009 respectively, Andrew Froese and Melanie Klippenstein helped promote the actuarial program to prospective students.

(Judy Wilson)

$$P = \sum_{t>0} \frac{1}{(1 + f_{0,h})^h (1 + f_{1,h})^h}$$

6

Part 6:

Toward the End of the First Century



Jerry Gray retired as Dean in 2004 and he was succeeded by another staunch supporter of the actuarial program, Dr. Glenn Feltham.

From the outset, Feltham could see the value and importance of the program, by itself and to the School, and the mutual benefits involved.

He has also demonstrated a keen interest in the program's past, its history, an approach he has taken toward all departments within the School. (Feltham would consider *Assessing the Risk* a page-turner.)

As its centennial anniversary approaches, the actuarial program has both changed and remained the same. The two-man, two-course operation of 1912 has evolved into the Warren Centre with its Chair and guaranteed positions. Research activities have been added to the traditional teaching role. These often include students and are grant funded. Involving such subjects as crop insurance and obesity studies, the research by the faculty demonstrates what a broad application actuarial science has, something not readily appreciated outside the profession.

Actuarial science remains a boutique within a large and respected business emporium. Led by Drs. Pai and Cox, the latter being the 2nd Warren Chair, the Centre has a faculty of four full-time members and two adjunct professors. Several practising actuaries, as part-time sessional appointments, also teach courses in the program each year, another means of ensuring a relevant education and a continued



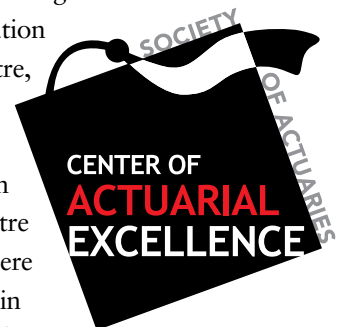
connection with the business community. Together, they teach a small, select group of students a basic training in a specialized profession with a very high rating. Out of 250 jobs, the *Jobs Rated Almanac* rated actuary as the second best in the world. A 2010 *Wall Street Journal* survey ranked it as job No.1.

In 2009, in recognition of the high standard of actuarial education offered by the Warren Centre, the Society of Actuaries, the largest actuarial professional organization in the world, deemed it a Centre of Actuarial Excellence. There are only three such centres in Canada and twelve in Northern America.

Manitoba had returned to its former stature as the “respected place for doing it right.”

2010 Actuarial Club Council, from left to right: David Ng, Maxim Kharitonov, Kerem Leylek, Maambo Mujala, Andrew MacKay, Clayton Orne, Adam Rogocki, Garrett Klus

(Bob Talbot)



Far left photo
(Judy Wilson)

Endnotes

- ¹ Blanchard, Jim, *Winnipeg 1912*, University of Manitoba Press, 2005, outside back cover
- ² Minutes, University of Manitoba Senate, March 8, 1938
- ³ Mundie, John, *Faculty of Commerce*, undated history of the Faculty, page 1
- ⁴ *The Dean's Letter*, November 1986, page 3.
- ⁵ *Ibid.*, page 3.
- ⁶ Letter, Sydney Jackson to Laird Rankin, December 23, 2009.
- ⁷ *Ibid.*
- ⁸ "Recollections of Dr. Warren", part of an untitled, unpaginated attachment to letter John Bragg to Laird Rankin, February 4, 2010.
- ⁹ "Recollections of being a Part-time Assistant in the Statistics Lab 1942-43", part of an untitled, unpaginated attachment to letter John Bragg to Laird Rankin, February 4, 2010.
- ¹⁰ *Ibid.*
- ¹¹ *University Bulletin & Alumni Journal*, Volume 11, No.1, January 1950.
- ¹² Mundie, John, *Faculty of Commerce*, an undated history of the Faculty, page 2.
- ¹³ *Ibid.*, page 3.
- ¹⁴ Letter Donald Gauer to Laird Rankin, February 2010.
- ¹⁵ E-mail, Elias Shiu to Laird Rankin, December 15, 2009.
- ¹⁶ E-mail Elias Shiu, to Laird Rankin, January 25, 2010.
- ¹⁷ Annual Report to the President, 1960-1961.
- ¹⁸ *The Dean's Letter*, November 1986.
- ¹⁹ Annual Report to the President, 1961-62.
- ²⁰ E-mail, John Mundie to Laird Rankin, March 5, 2010.
- ²¹ Attachment to e-mail Elias Shiu to Laird Rankin, April 25, 2010.
- ²² *Obituary*, *Winnipeg Free Press*, January 13, 2008.
- ²³ Attachment to e-mail Michael Byrne to Laird Rankin, January 23, 2010.
- ²⁴ Gray, Jerry, "Running the Risk Business", *Asper Business*, Fall 2003, page 46.
- ²⁵ *Ibid.*, page 41.
- ²⁶ *Ibid.*, page 40.
- ²⁷ E-mail, Jerry Gray to Laird Rankin, January 17, 2010.
- ²⁸ E-mail, John Mundie to Laird Rankin, March 5, 2010.
- ²⁹ Attachment to e-mail Jerry Gray to Laird Rankin, January 13, 2010.
- ³⁰ Gray, Jerry, *The History of the Asper School of Business*, July 2007, page 93.
- ³¹ *The Dr. L.A.H. Warren Chair in Actuarial Science at the University of Manitoba*, fund-raising booklet, page 2.
- ³² *Ibid.*
- ³³ *Ibid.*
- ³⁴ *Ibid.*, page 3.
- ³⁵ Gray, Jerry, *A History of the Asper School of Business*, July 2007, page 95.
- ³⁶ Letter, Kevin Shand to Glenn Feltham, August 17, 2006, page 4.
- ³⁷ *Ibid.*
- ³⁸ E-mail. Michael Byrne to Laird Rankin, January 16, 2010.
- ³⁹ *Ibid.*
- ⁴⁰ *Ibid.*

Selected Bibliography

Books, Publications, Documents

- Blanchard, Jim, *Winnipeg 1912*, University of Manitoba Press, Winnipeg, 2005.
- Brown and Gold*, 1941, 1943, 1950-51, 1952, 1956.
- Course in Commerce*, Session 1937-1938, Supplement to the University Calendar of the Faculty of Arts and Science for 1937-1938.
- Evening Business Courses*, 1917-1918, October 1917.
- "*Estimated Registration: Description of Procedure*", report by L.F.S. Ritcey and G. Crofts, June 14, 1954.
- Extension Courses in Commercial Subjects*, 1927-1928, October 1927.
- Faculty Development Plan 1990-1994, March 1989.
- Gray, Jerry, *A History of the Asper School of Business*, July 2007.
- Gray, Jerry, "*Running the Risk Business*", *Asper Business*, Fall 2003.
- Henderson Directory*, 1912.
- Minutes, Committee of the University Faculty on Pension Schemes, Feb 18, 1918.
- Minutes, University of Manitoba Senate, June 11, 1937, October 7, 1937, February 3, 1938, March 8, 1938.
- Minutes, University of Manitoba Board of Governors, January 26, 1921, November 1, 1922, December 6, 1922, January 17, 1923, March 7, 1923, December 1, 1927.
- Minutes, University of Manitoba Board of Studies, November 16, 1910.
- Mundie, John, *Faculty of Commerce*, an undated history of the Faculty.
- Order of Proceedings, Annual Convocation, University of Manitoba, 1912, 1939, 1940, 1941, 1943, 1963.
- Progressive Conservative Candidates, 1997 Federal Election, *Wikipedia*.
- The Dean's Letter*, November 1986.
- The Manitoban*, Volume 36, No.5, October 13, 1949.

The Dr. L.A.H. Warren Chair in Actuarial Science and Research, fund-raising booklet, undated.

University Bulletin and Alumni Journal, Volume 11, No. 1, January 1950.

University of Manitoba General Calendar, 1910-1911, 1911-1912, 1912-13, 1921-1928, 1944-1945 to 1956-1957.

University of Manitoba President's Reports, 1938-1968.

Winnipeg Free Press, January 1, 1949, February 28, 1950, January 13, 2008.

Woodhouse, Howard, *Selling Out*, McGill-Queen's University Press, 2007, Chapter 2

Correspondence

As listed in Endnotes, plus:

E-mails i) attachment from Ken T. Clark to e-mail Scott McCulloch to Laird Rankin, April 4, 2010; ii) from Ken T. Clark to Laird Rankin, April 27, 2010.

E-mail, Lewis St. George Stubbs to Laird Rankin, January 6, 2010.

Letter, R.M. Raeburn, Secretary, Board of Governors to Dean Mackness, December 10, 1993.

Interoffice Memo, Eric Seah to Dr. James Gardner, February 20, 1992.

Letter, Dr. James Gardner to W. Mackness and E. Seah, April 24, 1992.

Memorandum, William Mackness to All Faculty Members, April 29, 1992.

Memorandum, Eric Seah to All Faculty Members, May 1, 1992.

Memorandum, Dr. J. Gardner to William Mackness, May 25, 1992.

E-mails, Jerry Gray to Laird Rankin, September 20, 21, 2010.

Interviews

Interviews: i) on voice recorder: Monique Maynard (by telephone, February 16, 2010, with notes in Word file), Dave Morrison (in person, February 24, 2010), Elias Shiu, (in person, January 7, 2010); ii) Kevin Kavanagh, (by telephone May 7, 2010 with notes in Word file.)

Actuarial Department Heads

Lloyd Warren, 1937-1949

Lee Ritcey, 1949-58

Ernie Vogt, 1958-1974

Hendrik Boom, Acting Head
1974-81

Ernie Vogt, 1981-1983

Yash Gupta, 1984-1985

Elias Shiu, Acting Head 1985-86

Yash Gupta, 1986-87

Ernie Vogt, 1988-1991

Eric Seah, 1992-1993

Warren Centre Directors; Warren Chairs

Jacques Carrier, February 1994-
January 1995, Interim Director,
Warren Centre

William Mackness, January 1995-
June 1995, Interim Director,
Warren Centre

Kevin Shand, 1995-1997, Assistant
Director, Warren Centre

Michael Byrne, January 1, 1997-
June 30, 2004, First Warren Chair,
part-time basis, and Director,
Warren Centre

Kevin Shand, 2004-June 30, 2009,
Director, Warren Centre

Samuel Cox, July 1, 2007 to present,
2nd Warren Chair

Jeffrey Pai, July 1, 2009 to present,
Warren Professor and Director,
Warren Centre

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$$E[AV_n^2] = E[(1+i_1)^2] \\ = E[(1+i_1)^2]$$

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