

RECORD, Volume 24, No. 3*

New York Annual Meeting
October 18–21, 1998

Session 152PD Credit Disability Tables for Pricing and Valuation

Track: Nontraditional Marketing

Key Words: Marketing

Moderator: CRAIG A. SQUIER

Panelists: ROBERT J. BUTLER
CHRISTOPHER H. HAUSE
STEVEN L. OSTLUND

Recorder: CRAIG A. SQUIER

Summary: Credit disability insurance has had no generally accepted continuance tables for use in pricing or valuation. The industry has struggled with this shortcoming for most of its history and has always found deficiencies in any tables that were proposed. However, recent work has resulted in ways to adapt some of the existing disability tables to better meet the needs of a credit insurer.

Mr. Craig A. Squier: Our three panelists have many years of experience in the credit insurance industry. Steve Ostlund is assistant vice president and actuary with CUNA Mutual Group. He is responsible for credit insurance regulatory and pricing areas. Chris Hause is currently a managing partner with William Buchanan & Associates. His responsibilities have included reserve calculations and loss analysis as well as software development for the insurance and banking industries. Bob Butler is vice president and appointed actuary with American Bankers Life Assurance. He is a member of the Consumer Credit Insurance Association (CCIA) Actuarial Committee and a council member of the Nontraditional Marketing Section.

Steve Ostlund will be the first to present, and he will talk a little bit about various characteristics of various tables and how they relate to credit insurance.

*Copyright © 1999, Society of Actuaries

Note: Tables 8 and 9, and the forms referred to in the text can be found at the end of the manuscript. Tables 10 and 11 are not available online. Please contact Linda Blatchford at lblatchford@soa.org or call 847/706-3564 for a hard-copy.

Mr. Steven L. Ostlund: I want to provide a bit of a background as to why we chose the 1985 Commissioners' Individual Disability Table A (CIDA). Within the credit regulations there are generally two tables that are currently in use, the 1964 Commissioners' Disability Table (CDT), which is used as the valuation standard primarily for claim reserves, and the 1968 Credit Table, which is underlying or the basis of most of the prima facie rate schedules used by most of the states. Both are hopelessly out of date and, in fact, are the same after 24 months.

Paul Barnhart showed the industry that the 1974 table was inadequate for claim reserves, and he developed his experience modification. The 1964 table shows that the frequencies are too low; in the 1968 table, the terminations are too high. In looking for alternatives we found just three possibilities; in reality it turns out to be only the one—the 1985 CIDA.

I was going to ask if there were any pension actuaries here looking for Enrolled Actuary credit. In a weak moment we cosponsored with the pension actuaries, and we included the 1985 Pension Disability Table in our analysis. The 1987 Group Long-Term Disability Table (GLTD) is a salary continuance table. It has very low frequencies and only begins at the three-month elimination period, so it's not much help for a 14-day or a 30-day table. Similarly, the pension table uses Social Security experience and thus has a five-month elimination. The 1985 CIDA, however, allows us to look at both a 14-day and a 30-day table by gender as well as by occupation. Bob will explain later the mix we use to develop the composite table, and we'll concentrate on the 14-day table where the majority of single premium is written.

I'll move through these six tables rather quickly. Just to give an overview of the comparisons we'll start with the frequencies in each table, and we'll look at the frequency, at the elimination period, and then at the three-month period.

We'll start with the 1968 Credit Table (Table 1) which is the basis for most of the state rates, as I mentioned before, and we probably should concentrate on the 14 retroactive, as opposed to the 14-day or the 30 retroactive, and then the 30 non-retroactive. We'll see that the frequencies are 5.7% at the elimination for the 14 retroactive, 2.2% at three months, 2.9% (just about half) for the 30-day non-retroactive, and 1.6% for the 30 non-retroactive.

TABLE 1
1968 CREDIT TABLE

	14R	14NR	30R	30NR
Freq. @ Elimination	5.66%	4.91%	3.95%	2.88%
Freq. @ 3 months	2.20	2.48	1.75	1.56
Continuance Probability				
3 to 6	56%	61%	52%	50%
6 to 12	54	60	54	53
12 to 24	69	72	63	65
24 to 60	66	66	66	66

Source: 1968 Proceedings of the NAIC

If we move to the 1964 CDT (Table 2), we see that the retroactive and non-retroactive are not differentiated, and we also see that we have 10.8% as the frequency at 14 days, which is about double the 5.7% in the 1968 table. Similarly, for 30 days the 5.9% is double the 2.9% in the 1968 table. We've done this on purpose in the 1964 table in order to create a conservative active life table (as noted by Paul Barnhart in 1971); however, at three months we're already down to a 1.3% frequency for both the 14 days and the 30 days because the 1964 table was a single table. This 1.3% compares to 2.2% for the 14 days and 1.6% for the 30 days in the 1968 table.

TABLE 2
1964 COMMISSIONERS DISABILITY TABLE

	14NR	30NR
Freq. @ Elimination	10.77%	5.90%
Freq. @ 3 month	1.26	1.26
Continuance Probability		
3 to 6	27%	27%
6 to 12	50	37
12 to 24	73	73
24 to 60	73	73

Source: 1965 Proceedings of the NAIC

The 1971 table (Table 3) shows Paul Barnhart decreased the initial frequency to a more reasonable 7.3% and 4.9%, both of which still significantly exceed the 5.7% and the 2.9% of the 1968 table. As we'll see later, however, the 7.3% currently understates the frequency of 14-day plans now. Paul flattened the continuance at three months, but still we see the credit business stays at a higher level so that the 1.4% doesn't even come close to the 2.2% or the 1.6% in the 1968 table. In the 1987 table (Table 4), essentially there is no frequency at three months at 0.3%.

TABLE 3
1971 COMMISSIONERS DISABILITY TABLE
EXPERIENCE MODIFICATION OF THE 1964 CDT

	Male 14	Male 30
Freq. @ Elimination	7.3%	4.9%
Freq. @ 3 month	1.4	1.4
Continuance Probability		
3 to 6	27%	27%
6 to 12	50	50
12 to 24	75	75
24 to 60	66	66

Source: 1973 Transactions of the SOA

TABLE 4
1987 GROUP LONG-TERM DISABILITY

	Male	Female
Freq. @ Elimination		
Freq. @ 3 month	0.3%	0.5%
Continuance Probability		
3 to 6	78%	77%
6 to 12	78	76
12 to 24	80	79
24 to 60	80	84

Source: 1987 Transactions of the SOA

If we move on to the 1985 Pension Disability Table (Table 5), you'll note that we are looking at six months because we are looking at Social Security. There is a little bit higher frequency at 0.7% but still nothing that we can really use. If we look at the 1985 CIDA composite (Table 6), current experience indicates that we're looking at a 9.1% at 14 days, which compares to 5.7% back in 1968. We do see an increase in the frequency. This increase is also evident in the 30-day column with the 4.7% compared to the 2.9% back in 1968. At three months we see that claims are continuing longer with a 2.6% frequency compared to 2.2% in 1968 and 1.9% compared to 1.6% for the 30-day table.

TABLE 5
DISABILITY PENSION-85

	Male	Female	Unisex
Freq. @ Elimination			
Freq. @ 3 month	0.7%	0.6%	0.7%
Continuance Probability			
3 to 6			
6 to 12	88%	87%	88%
12 to 24	88	88	88
24 to 60	79	84	81

Source: 1986-87 Proceedings of the Conference of Actuaries in Public Practice

TABLE 6
1985 CIDA COMPOSITE

	14 R/NR	30 R/NR
Freq. @ Elimination	9.1%	4.7%
Freq. @ 3 month	2.6	1.9
Continuance Probability		
3 to 6	44%	44%
6 to 12	52	52
12 to 24	71	71
24 to 60	79	79

I'm trying to explain this quickly because the meat of the argument is coming later. In the 1968 table, if we look at the continuance experience, we see that about half of the claimants are continuing from three months to six months, and the other half are continuing from six months to 12 months.

When we look at the 1964 table we only see a quarter of the claims continuing for the first 6 months, and then we're back to half from 6 to 12 months. Paul used the same frequency from three to six months, but then he moved it up to about three-eighths, or to 37%, for six to 12 months. He had a higher termination rate after the six to 12 months.

When we look at salary continuance tables we're looking at 78% for both three to six months and six to 12 months in Table 4, indicating that once they're on claim they tend to stay on claim. Similarly with the pension table (Table 5) we're looking at 88%. In the pension table, that's just through the first three months, from six to 12 months. They are the only data we have there.

As we look at the 1985 composite table that we've constructed (Table 6), we're seeing 44% compared to the 56% or 50% that we saw in 1968 (Table 1). Then from six to 12 months we're seeing a similar continuance—52%—as compared to the 54% back in 1968. During the first year we're looking at 69%, about two-thirds. Claimants continue during the second year. And then we're seeing about another two-thirds who are going from the second to the fifth year. This is similar to what we're seeing in the 1964 CDT (Table 2), and after 24 months we're actually looking at the same termination rates that were derived in the 1952 Intercompany Disability Tables. So we're looking at really old experience beyond the two-month period.

For 1987 or the Experience Modification (Table 4), we're seeing similar results of 73%, but Paul indicated that there will be fewer terminations in the second through the fifth year. Salary continuance is 80%. Again, once they're on claim they mostly stay on claim. With the disability pensions (Table 5) we're mostly looking at

termination rates that are only developed from death experience, with no recoveries. They're mostly on pension, and they're retired at that point.

The 1985 CIDA (Table 6) shows 71% continuing from 12 to 24 months, which is stronger than the 1968 table which showed 69% and 65%. After two years, however, we see a 79% continuance instead of the 66% shown in the 1968 table.

Mr. Perry E. Kupferman: I have a question, Steve. You talk about the pension table, which automatically makes me think in terms of age. Was any of what you looked at age specific?

Mr. Ostlund: We're looking at male, age 42, in most of the data that I showed. So the pension was a 42-year-old who was going on disability. I'll now turn it over to Chris, who will explain how we obtained these data.

Mr. Christopher H. Hause: For this part I'm just going to refer to Form A, Form B, and then Tables 8 and 9. The CCIA is spearheading the data collection, of which CUNA Mutual and American Bankers are members. I was selected to accumulate these data because I am not a member company of the CCIA. I'm a consulting actuary, and it was felt that people would be more comfortable sending their in-force data to a third party as opposed to another member company.

Before we get into that, we probably ought to explain just a little bit about how we propose to go about modifying the 1985 CIDA Table A (Table 7). In order to come up with a composite table, it became necessary to know what ages, terms, and plans of insurance various companies were writing. We chose to do that based on the initial face amount, the total note, if you will, in the credit insurance nomenclature, which perhaps somewhat erroneously we called exposure. It's the initial face amount. We chose to do that based on 1997 issues for single premium credit disability, and that's exactly what we're studying.

TABLE 7
1985 COMMISSIONERS' INDIVIDUAL DISABILITY TABLE A
OCCUPATION 3

	Male 14R/NR	Female 14R/NR	Male 30R/NR	Female 30R/NR
Freq. @ Elimination	8.2%	14.4%	4.6%	7.5%
Freq. @ 3 month	1.1	2.2	2.0	3.0
Continuance Probability				
3 to 6	44%	43%	44%	43%
6 to 12	54	50	54	50
12 to 24	71	70	71	70
24 to 60	77	82	77	82

Source: 1985 Transactions of the SOA

The first step of the process was to find a reasonable distribution based on all the member companies that would submit data, and, as it turns out, we managed to achieve a fairly high percentage of the total credit disability written in the United States. It was about 60% or more. I think we ended up at just about two-thirds, which we were quite happy with. We set about the task of building a distribution of age, face, and term. The information that we would also like to have had included in the study would have been gender, but it was found that many of our respondents did not record that information. Some of them did, but we found in trying to construct the table, that we were going to construct it on the basis of age, term, and plan of insurance. When we say “plan,” we mean the elimination period.

A cover letter and the data request were sent out by the executive director of CCIA to member companies requesting the data. Form A was a cover sheet, if you will, for the data to be submitted. We used the companies’ 1997 credit disability single premium direct writings to determine the percentage of the business written by the companies contributing. Ideally, we would have liked the plan of insurance, age, term, sex, and occupation class. That would have been the optimal information. Occupation class is clearly not available, and gender information was fairly spotty.

On Form B we didn’t even request occupational data. It just wasn’t even worthwhile from what we had done. The potential respondents whom we polled encouraged us not to even include that information. It might only frustrate and alienate people.

The information, as you might note, is requested in summary format. We wanted it to be summarized by like age, sex, term, and plan; company ID numbers were available for confidentiality. That wasn’t necessary. It turned out that most of the companies were submitting without needing strict confidentiality in this case. All of the data that were tabulated and submitted to the CCIA for review were noncompany. It did not name the company, which was given a number by me.

The first five fields were the sorting fields. No data that came to me were actually collected by age range. We thought that maybe some people would have age ranges. That didn’t turn out to be the case. The main objective of this phase was to collect the original amount of insurance issued or total note, if you will, by age, term, and plan. Although not technically correct, I adopted the word *exposure*, so you’ll see the word *exposures* there. That really amounts to total note. The last five fields and the gender information, as it turned out, were then used for informational purposes so that we could see what people are writing. How much of the data submitted were, for instance, critical period or joint? The information was requested in ASCII text, fixed link.

Regarding summary records, we recognized, of course, that we'd have to take just about whatever people sent us, and in many cases that's what we got. We received database files. We received comment unlimited files. We received just about everything, but we had no problem at all transmitting the information into a standard format. We just had to write a small program that converted and dropped the fields and slots. Because we did that we felt much more comfortable when we sent the summary information back to our companies after we compiled it and said, "Does this look like your data? Do we have some control totals to match up?" As a matter of fact, one company said, "No, that's not right at all. What did we send you?" So that turned out to be a good thing as well once the data were summarized.

We summarized it into a three-dimensional matrix plan. Zero through five, and not available was also treated as unknown in the plan matrix. Ages zero through 99 and in terms of insurance, zero through 240 months are used because those are the data that we were given.

From the Floor: Did you have truncated business as well?

Mr. Hause: There was likely some truncated business as well, but it was treated just as though it were full loan coverage. If you look at Table 8 (see end of manuscript), it's labeled Total Exposures As Of, then there's a date stamp, and then Exposures by Term in thousands. There are three sections to this table: exposures by term, zero through 240 months; exposures by age, zero through 99; and exposures by plan. It basically sums the three-dimensional array across term, age, and then plan of insurance. When we did that we found—and we knew this in advance—that some companies would use age 35 or 42 as a default. Many companies poll their business for average age. Sometimes a certificate is submitted without an age on it—I know that it's a dangerous practice in terms of legalities, but it is, in fact, a practice to put it on the system as a default or average age, which became very apparent.

With some of the business we'd achieve a certain level of exposure, and then we'd find age 47 would be twice as much exposure as the ones on either side. So, in that case, we took the arithmetic average. First we made sure that there weren't two higher ages in a row; that never turned out to be the case, although some companies did have what we called bumps at several ages. Perhaps one segment of their business or maybe a large general agent always submitted age 35 because they didn't ask. Another segment of their business used a different default; this was actually informative to some of our member companies. So we smoothed that at the plan and term levels of the matrix and then recompiled the data. We then sent the company back the raw data so that they could match their control totals, and

some of the data were then eliminated by this smoothing. So no data were added. Data were only eliminated, and that was just done on an arithmetic average basis, assuming the part that we were eliminating was distributed at least reasonably like the balance of their business.

Mr. Kupferman: Were there some extremes such as very long terms or very high issue ages?

Mr. Hause: We did find that. As a matter of fact, we found some 96- and 97-year-old people being issued credit disability insurance. That was the age. It was just a faulty data situation. Later on you'll see that because of the way the data were actually used that these were, in fact, omitted in what we eventually did.

So here we are with this array with 144,600 elements, and I think Bob Butler probably would have dropped dead or shot me if I'd have sent him these data. We had to come up with, of course, a reasonable way of collecting them into a central age and term. Bob had done a preliminary study based on American Bankers' own business that we used as a model for collecting ages and terms. We chose every six months from 6, 12, 18, up through 26 months, and then every 12 months above that to 120 months. The data were sparse enough over 120 months that we didn't feel they were usable.

We did actually get some over 240 months. Table 9 is Credit Disability Exposures by Central Age and Term (000). There's one sheet of paper for this plan, the seven-day retroactive. We went from age 22 through age 67 in five-year increments, and then the term was collected as shown. If the term was zero, we eliminated it, and if the term was above 126 months, we dropped that information from this table. On age, it seems as if we dropped everything under age 17 and everything over age 70, because the data were sparse. Some obviously erroneous things were thrown out. We feel very comfortable that the study was usable. Once I developed the data, I called Bob and sent everything to him. So here's Bob.

From the Floor: What percentage of the credit business did we get? Do you know?

Mr. Hause: The total premium writings based on net premium written. Now, these were all gross, by the way. This shows gross initial face amounts. Cancellations were deducted from the data that were used for the study. In terms of the direct premium writing, that was net of cancellations because that's what we had available to us, and that was Line 20(a) on the annual statement. It was very easy to track, and I think it was about two-thirds of the industry, single premium.

From the Floor: What about monthly premiums and credit card, or credit disability?

Mr. Hause: There was no consideration given to monthly outstanding balance or credit card on a monthly basis coverage.

Mr. Robert J. Butler: Our purpose was to develop a policy valuation or a policy reserve valuation table, and monthly business wouldn't have a policy reserve. So we restricted the study to single premium business.

We started this project about 11 months ago. It was a charge of the CCIA to develop a morbidity table that we could use to set policy reserves. We excluded monthly business. There were two prior credit morbidity studies, 1968 and 1974, for which they actually went out and gathered exposure data and claim data. When we were asked to look at developing a morbidity table, we inquired whether we should do such a study, and we met resistance. Many companies were involved with the Y2K project conversion and didn't have the system time to do it. Also, many companies don't record why a claim is terminated. We don't record whether the person had an expiry of benefits or whether the person recovered, and if you're going to do a true morbidity table, you have to have those data. When we polled the actuaries representing the majority of the business, many of their companies do not have those data. So we chose not to use that approach but use an existing table and validate that table with actual experience. The 1974 study, though, was done using exposures and claim data, and the resulting claim costs were about twice what the industry was experiencing. I'm not sure that selecting that route would have given us satisfactory results anyway.

We chose to use the 1985 CIDA Table A and validate it using current credit disability experience. As part of our annual statement we have an annual supplement called the Credit Insurance Experience Exhibit (CIEE). It splits the experience among life, disability, unemployment, and property. It also distinguishes between single premium and monthly business, and for the disability it further breaks it into elimination period. The premiums are earned premiums—both actual earned premium and premiums adjusted to what they would have been had the company charged the prima facie rates that were in force at the end of the year.

We chose a five-year experience period, 1992–96, and you can see a summary of that experience in Table 10*. This is a summary of the results for the 14-day retroactive plan; we had \$5 billion of premiums earned at prima facie rates. We gathered the rates that were in force during this period for each year, in each state,

***Note:** Table 10 is not available online. Please contact Linda Blatchford at lblatchford@soa.org or call 847/706-3564 for a hard-copy.

for each plan, and for each term; we weighted it out using the exposure that Chris developed for us.

One of the things that you can see is the resulting rates, weighted rates, were quite flat during that period. There has been criticism in the past that the adjustment of earned premium to prima facie isn't done as carefully as it should be, but for the health insurance that doesn't seem to be a problem because the rates have been flat, stable, and the actual earned premium and prima facie earned are nearly the same. The loss ratios, you'll see, have been fairly flat with some improvement in recent years probably because of the economy.

The second biggest plan is seven-day retroactive, and you can see there's an anomaly. This is the most expensive plan of insurance, and yet the resulting claim cost is the lowest of all the plans. Part of the explanation is states restrict the sale of that plan to shorter durations. Many states don't allow you to sell it to over 60-month loans. We find that this plan is sold with small loans, like consumer finance loans, or auto dealer business where they want the maximum rate, and your ages are typically younger, but even when you take that out there is still this anomaly. The seven-day retroactive claim cost is the lowest claim cost of all the plans, and yet it should be just the reverse. It should be the highest.

And there's your 30-day retroactive experience. There's not as much volume, \$400 million. The 30-day elimination also has an anomaly. It had costs that are unusually high, and this should be the cheapest plan. In my opinion, that is caused by two things. Much of the credit union business falls in that plan, and that market has, for whatever reason, higher claim costs. It's not age. Age doesn't explain it. Term doesn't explain it. It's just a higher cost market. And what we also found is that when you are dealing with large loans or with an account that has poor experience, that often becomes a default plan. You move the business into that plan to reduce the premium increase that is needed.

So we had our experience now in a form that we could use. We then looked at the 1985 CIDA, and the table is constructed with incident rates and termination rates that vary by five elimination periods, zero, 7, 14, 30, and over 90 days. It is further split into four occupation classes, 1, 2, 3, and 4, 1 being your least hazardous occupations and 4 being your most hazardous. And it has a split by age and gender. The goal, however, was to create one table that would combine both genders and have a composite occupation consistent with the way we record our data.

To get a distribution by occupation we went to the Bureau of Labor Statistics and used the distribution of the workforce in our study. We developed separate tables

for each combination of elimination period, age, gender, and occupation, and then we pulled it all together into one table by age, using a blending of 70% male and 30% female. Some companies had gender on their file, and they all reported somewhere between 68% and 71% of their business was male. Many of the companies that did not have it did samplings. I found only one exception, and that's one of our subsidiaries where 50% of the certificates were female, but when you weighted it by amount of insurance it became 70% male. So I think that's a good choice.

The male distribution adds up to 100%, so you have to discount that. Use 70% of those values when doing a composite table and 30% of the female values. As I said, we created, in effect, four composite tables. Each has specific data by age, and those are the 7-, 14-, 30-, and 90-day plus. Each table consists of the disabled lives by duration, and we reformatted that into the commutation functions used in prior studies, and credit studies of an S_x , M_x , and R_x . S_x is the annual claim costs of \$1 per day for that day of disability. So it's an annual claim cost. The M and the R are the summation of those commutation functions.

The following are the formulas that we used to compute the credit, single premiums:

**Construction of New Credit Disability Table
Commutation Functions and Single Premium Formulas**

Daily commutation functions were constructed in the same fashion as was done for the 1968 and 1974 NAIC Credit Disability Basic Tables. The commutation functions created were:

$C_{x:t}$ = annual claim cost for a payment of \$1.00 for day of disability t for a person age x at date disability commenced.

$M_{x:t}$ = sum of the values $C_{x:t}$ from the earliest day of disability through day t .

$R_{x:t}$ = sum of the values $M_{x:t}$ from the earliest day of disability through day t .

The single premium claim cost per \$100.00 of initial insured indebtedness for a plan of insurance with an elimination period of e days and an initial term of coverage of $(t/30)$ is;

$$\text{Net Single Premium} = (100 / 360 t) [R_{x:t} - R_{x:e} - (t-e) M_{x:e}]$$

The additional single premium needed to convert the coverage from a straight elimination period of e days to a retroactive elimination period of e days.

$$\text{Additional Net Cost} = (100 / 360 t) [e(t-e) C_{x:e+1}]$$

Note: Formulas assume 30 day months and 360 day years. The Basic Credit Disability Table, 1985 CIDA, are for ages at disablement of 22, 27, 32, 37, 42, 47, 52, 57, 62, and 67.

When we did that, the result was Table 11[†]. When you weight it all out by age and term the seven-day retroactive, based on the 1985 CIDA, is the claim cost of \$2.58, where experience is \$1.84. The 14-day retroactive's claim cost, which represents 70% of our business in the new table is \$2.41 compared to \$2.13 for the experience period. You can see the overall results on the bottom, and it's not really a bad fit. You can see overall that the 1985 CIDA, using the composite table that we created, has a single claim cost of \$2.33 compared to our experience of \$2.10. I feel comfortable with that because right now we're in a very good economic period, and I would think that the base table ought to produce costs that are a little bit higher to cover a wider range of economic conditions.

When we did this we had the incident rate for each age and then the termination rate for that age. After building a continuance table for each age, claim costs were computed for each of those ages for the term of the loan. This assumes that each person remains the same age throughout the term of their loan, which is not true. We went back and corrected for that, and on the 14-day retroactive plan, instead of having a \$2.41 composite claim cost, we ended up with \$2.53, a small increase that was not meaningful. If we were to discount that for lapses that'll occur during the term of the loan, the difference becomes even narrower. So I believe that the way we validated the table is justified, and I feel comfortable that the results are accurate. The adjustment, though, will be important if you want to get true claim costs for the business by term, especially at the longer terms, and that is what we're doing. For purposes of validating the table, however, we didn't make that adjustment.

We did some sensitivity testing using a 14-day retroactive plan because that represents 70% of our business. Using 70% male, we get \$2.41. Changing it to 100% male or 50% male doesn't change the result in claim cost that much. So it's not that sensitive to gender, and that's probably because females, although they have higher claim costs, have a better occupation mix.

I also looked at what would happen if we really shifted more of the business to the worst occupations. There's an argument that the better occupations aren't the buyers of credit insurance as a group. I would argue that they might not buy as much, but when they do buy they make bigger loans. So I think they net out. But I looked at what would happen if we took five percentage points, not 5%, but five percentage points, out of each of the Occupations 1 and 2 and put five percentage points into Occupations 3 and 4. I also did the same thing with 10%, and I don't think it's that significant. (See Table 12)

[†]**Note:** Table 11 is not available online. Please contact Linda Blatchford at lblatchford@soa.org or call 847/706-3564 for a hard-copy.

TABLE 12
SENSITIVITY TESTING—14 RETRO

Test	Weighted Rate
70% male	2.41
100% male	2.23
50% male	2.53
Std Occ Mix	2.41
Shift 5% to occs. 3&4	2.52
Shift 10% to occs. 3&4	2.64

So I feel very comfortable that our table, the table that we created from the 1985 CIDA, the composite table, is representative of credit experience. And I'm going to turn it back to Chris who will discuss how do we go from here to a valuation table.

Mr. Hause: As Bob said, the next step, of course, is to take that table, decide on a basic table that reasonably and conservatively gives us a starting point, and then add proper margins—and proper margins, like many things, are in the eye of the beholder.

The first step is to select a baseline table. What is our basic table? I hate to use the word "basic" in this context, so I'm going to call it a baseline table. Our starting point is the 1985 CIDA. Because credit insurers do, in fact, refund the gross premium on death, and the loss ratio for the major plan of insurance was 51%, Bob developed a method to refund 200% of the net premium on the death of the insured. This would approximate a refund of the gross premium, if you will. Of course, this assumes that the insurance company is liable for 100% of the gross premium refund, which is rarely the case, but in terms of this table we're going to ignore the refunded commissions that the company receives back. Five percent is what we're going to use right now for interest comparison and for exposure of the table. We also used the 95% termination rate adjustment; that is, we took the termination rates across the board and multiplied by 0.95. Once again we took the baseline gender and occupation class, gender-observed data from the contributing companies, which is 70% male occupation class. Bob's use of the skewing of the occupation class to perhaps remove the argument that the distribution of occupation class by the Bureau of Labor Statistics was not representative of buyers of credit insurance.

Now, I know that we're all actuaries, and we have many numbers bouncing around in our head, but I'm going to ask you to remember 60.4% for awhile. The 60.4% was the result of our distribution of 14-day retroactive using the mean—the average—of the pro rata and the rule of 78—unearned premium reserve on the national average single premium. We said, "OK, here's our baseline table." In aggregate, based on the in-force distribution of age, sex, and term, which is dictated

by what our study produced, the baseline table produced 60.4% of gross unearned premium in the aggregate for 14-day retroactive. And we're very comfortable with that margin. The other thing that we noted by duration was that the run-off of the reserves based on this table was actually higher than the mean. They started out at 50 and climbed up to 60 as the duration increased. So we feel that the run-off of the reserves being slower than the average of pro rata and the rule of 78 was a positive note in terms of sufficiency.

Then we started taking a look at the sensitivity testing to see what might be appropriate margins. The gender mix, the distribution of occupation, and the termination rate adjustment were the three areas that we looked at. Bob looked at 100% female and 50% female, and one of the things that was kind of interesting was that the females have a higher percentage in the Class 1 and 2 occupations. So moving from male and female without an occupational class adjustment to 100% female only created an additional margin of 18%. Do you recall that I asked you to remember 60.4%? This 71.5% compares to the 60.4%. It gives you an 18% margin over the baseline table, and 100% female actually decreases it by 8%.

Regarding occupation, certainly there are other ways to do this, but we just subtracted a fixed number of percentages points from the occupation Classes 1 and 2 and added those to Classes 3 and 4 respectively. Ten percent is what was used on the baseline. An additional 5% creates an additional 5% in terms. So we took 15% from Class 1 and put it in Class 3, 15% from Class 2 and put it in Class 4, and we increased 5% from the 10% baseline table. Just looking at how various percentages apply to the termination rates, we used 95% at the baseline level. Using 90% increased it by 5%. Although this might not have been a big surprise to people who have studied this intensely, it was to me. And then decreasing 85% by another 5% produced another 5% increase. This is an increase in the aggregate reserve held.

From the Floor: Is that per year?

Mr. Hause: This is an aggregate based on a distribution of in-force business that was observed by the study. So once again we're comparing an average block of policies in force by various ages, durations, etc., for the 14-day retroactive plan.

From the Floor: If the baseline is 95%, does that mean over the life of the contract you expect 5% termination?

Mr. Hause: No. The 1985 CIDA table has certain termination rates implicit in it. We took those termination rates and multiplied them by 0.95, adding an element of conservatism, more people persisting on claim.

From the Floor: So your recommendation is the 1985 CIDA table with these changes.

Mr. Hause: That's correct. Our recommendation is to use the 1985 CIDA table with that gender mix, the occupation class from the nationally observed data with that skewing, and to use a 90% adjustment to the existing termination factors.

From the Floor: You say you took national data. What does the national data tell you?

Panelist: Labor force by occupation.

Mr. Hause: It tells us to look at the recommendation that I'm making to this body of people and, I think, to look for comments. We're obviously going to do much more testing. Steve had suggested some Monte Carlo testing methods, which are maybe more consistent with the way that these margins have been developed in the past for disability tables, or at least are currently the practice, based on 5% interest, the suggested term mix, and, once again, a hypothetical durational distribution that I came up with just based on a distribution of in force by duration. The aggregate reserves equaled 73.3% of the mean unearned premium reserves for this distribution of in force for the 14-day retroactive plan.

So that represents a 21% margin over the baseline assumptions, and, once again, those with a lower age distribution and lower ratio will be achieved. Higher age distribution will produce a higher ratio. We didn't really attempt to determine at all an average age or anything of this sort. We wanted to really stay away from that and stay with a distribution throughout. Now this is based on the 14-day retroactive plan, which is 70% of the premium written in the United States. So if a company relies heavily on one plan or another, the results may vary assuming the 1985 CIDA is fairly consistent.

We hope that one of the uses of the table was to gain some consistency and a basis for which the rates may be related to one another—for instance, the 30-day retroactive plan versus the 30-day elimination plan versus a 14-day retroactive plan, and also the varying terms. We find that the states have very, very different theories about what should happen to the rates beyond 60 months. Some of the rates increase significantly faster than others, and some of them are very modest in their increase in the rate beyond 60 months in term. And we hope that this will also be useful to practitioners in developing alternative types of coverage such as critical period. It gives you a very solid basis for developing critical period and relating that to the prima facie for full-term coverage. We hope that it will be used for that.

Some additional considerations. Obviously disabled life reserves come immediately to mind. We have not really tackled that, but because we're messing around with the termination rates, we want to be very careful about what that, in fact, does to the disabled life reserves. We can do some studies to determine whether this termination rate adjustment would be appropriate.

Regarding tax reserve implications, obviously right now we're taking 20% off the gross unearned premium reserves, lowering that, or perhaps, I suppose, raising it if you have a very high age distribution. We'll have tax reserve implications if this is to become an accepted table—obviously state acceptance of this table. We have a route that we have to follow through the SOA. Hopefully, we'll get the support of the Nontraditional Marketing Section and the CCIA. We hope the SOA will fall into line as well the NAIC, and then the individual states. So it may be a while before we actually start using this table, even after it's verified.

We could develop sex-distinct tables very easily, I think, from this. What would be our recommendation, for instance, for disabled life reserves where the occupation class now is known? Could we develop occupation class tables? Of course we could. We can then parcel this out, use the same approach that we did on the aggregate table, and just split it up into individual occupation and sex tables.

From the Floor: How do you think the regulators will react? This is fine for reserving.

Panelist: For valuation, our goal was to reduce the statutory strain because we thought it was unreasonable that they don't recognize the fact that we pay a high commission. Although we can recover it on refunds, Chris ended up at 75% of the gross unearned as the end result. It seems to me you have to have at least that much, and right now we're holding 100%. Where can we realistically expect the regulators to allow us to go? I had in my mind something like 70–80% of the gross unearned. And also for tax reasons some companies like to have conservative reserves because that gives them a bigger tax deferral. By being at 75% the tax consequences become modest. I don't know where we end up.

From the Floor: Those are significant.

Panelist: Yes.

From the Floor: I don't know whether this is a fair question, but how would you expect regulators to look at margins?

Panelist: I was giving some thought to that. The Monte Carlo looks at the implicit variability within the experience and also looks at the intercompany experience to see how that varies and to try to get something that's representative that way. What Chris was showing was how you can get that margin.

Panelist: You're right, we do have to quantify this for the regulators. We looked back at the worst periods of disability that we had. That's why I did the sensitivity testing, and you'll notice in the sensitivity testing you stretch it a number of ways, and I felt that the 73.3% covered most of the ways that we could stretch it that were within reason.

From the Floor: I'll confess. Tell the regulator. OK? We pick the table, and we pick the margins.

Panelist: The base table.

Panelist: Well, yes. Another consideration, of course, is when we do use the refund of gross unearned premium reserve, less a recoverable commission argument, using something above 70% is going to lend us a little more credibility. If we were to come up with something that would be lower than in aggregate the net refund, net of commission refund in premium, we may meet some resistance there, too. So there's some appeal to staying above 70% from a regulatory acceptance standpoint.

From the Floor: The other way would be to vary it by source of business, class of business; then you're adding three or four banks, credit unions, or auto dealers.

Panelist: That's correct, and, of course, we don't preclude valuation actuary requirements of making sure that the tabular reserves are adequate for that company's business. We fully expect that the valuation actuary would look at the table and determine whether additional margins are needed for his or her business.

Panelist: We really didn't test the various elimination periods. That obviously is something we're going to have to do to make sure as this table is applied to the 30-day elimination plan. We're going to be more comfortable if that additional margin that's going for the 30-day elimination plan is covered as well.

Panelist: What should the committee do next? What should the group do next?

Panelist: It's a good question. What is next? I think that is *the* question.

Panelist: I think in order to get the support of the CCIA that fostered the collection of data, and perhaps the Nontraditional Marketing Section, we're obviously going to have to do those sorts of things, and we'll begin in terms of distribution of plan, etc. That's what's going to convince people that this is, in fact, a suitable valuation table. So when we do go to the SOA and the NAIC all those questions will have been asked already. That's what I think we need to do now.

Obviously as you go home and go back to those things that earn you money, other thoughts will occur to you. We would enjoy hearing from you as to how we could improve this and make it more acceptable to those parties that we're going to have to face.

Form A

Credit Disability Data Request
New Business Writings Only (Refunds Excluded)

Company Name

Company's 1997 credit Disability Single Premium Direct Writings

Amount and Percentage of Direct Business on Which Detail Data Provided

Period Covered by Detail data:
Beginning Month and Year
Ending Month and Year

Contact: Name
Address:
Phone
Fax #

Can we release name and company to Chris Hause? Yes
No

Form B

Record Layout of Disk File (ASCII) Containing Input Data

<u>Description</u>		<u>Field Position</u>	<u>Comments</u>
Company Name or ID given by CCIA		1 to 20	
Age Last Birthday Low		21 to 23	
Age Last Birthday High		24 to 26	Can be same as low
Original Term in Months		27 to 29	Insert 000s if not available
Elimination Period:	1 = 7 retro 2 = 14 retro 3 = 14 elim 4 = 30 retro 5 = 30 elim 6 = other 0 = not available	30	
Sex:	1 = male 2 = female 0 = not available	31	
Original Single Premium		32 to 43	Dollars and cents
Original Amount of Insurance Issued Note: this equals monthly indemnity times term in months)		44 to 50	Dollars only
Monthly Indemnity		51 to 57	Dollars and cents
Source of Business	1 = Auto 2 = Financial Institution 3 = Finance Company 4 = Other 0 = Not available	58	
Underwritten	1 = Yes 2 = No 0 = Not available	59	
Joint/Single	1 = Single 2 = Joint 0 = Not available	60	
Pre-ex Indicator	1 = Pre-ex applies 2 = No Pre-ex 0 = Not available	61	
Critical Period Indicator	1 = Full Benefit 2 = Critical Period 0 = Not available	62	

TABLE 8
TOTAL EXPOSURES AS OF 1998 10 1 11 3 18 130 BY TERM (000)/AGE/PLAN

Term	Exposure	Term	Exposure	Term	Exposure	Term	Exposure	Term	Exposure
0	2,844,581	50	13,615	100	1,820	150	162	200	0
1	205	51	4,982	101	516	151	0	201	0
2	268	52	10,069	102	909	152	168	202	0
3	1,672	53	10,540	103	836	153	0	203	0
4	1,865	54	576,004	104	557	154	0	204	188
5	3,304	55	7,814	105	817	155	0	205	0
6	23,104	56	4,733	106	1,149	156	1,038	206	0
7	6,223	57	4,320	107	888	157	4,831	207	0
8	9,016	58	5,434	108	21,635	158	74	208	40
9	22,068	59	133,912	109	1,005	159	8,265	209	0
10	20,458	60	7,378,191	110	995	160	0	210	0
11	10,485	61	60,601	111	724	161	53	211	0
12	353,062	62	14,918	112	6,106	162	185	212	0
13	29,540	63	2,372	113	539	163	6,157	213	0
14	10,073	64	1,101	114	986	164	0	214	0
15	56,104	65	2,766	115	981	165	0	215	160
16	9,073	66	475,938	116	735	166	107	216	0
17	8,851	67	2,227	117	469	167	118	217	0
18	486,508	68	2,032	118	872	168	3,921	218	0
19	24,816	69	959	119	43,071	169	74	219	0
20	39,817	70	1,133	120	883,860	170	30	220	0
21	33,727	71	1,745	121	22,005	171	8,732	221	0
22	9,808	72	799,657	122	2,135	172	127	222	0
23	134,066	73	4,228	123	0	173	0	223	0
24	1,652,141	74	4,134	124	55	174	157	224	0
25	261,311	75	676	125	157	175	0	225	0
26	20,318	76	645	126	27	176	39	226	0
27	24,359	77	4,312	127	0	177	91	227	0
28	16,766	78	14,143	128	0	178	428	228	2,338
29	11,555	79	1,165	129	33	179	144	229	32
30	738,346	80	2,003	130	111	180	598,460	230	0
31	28,499	81	852	131	29	181	112	231	0
32	16,794	82	688	132	813	182	0	232	0
33	18,147	83	8,226	133	75	183	0	233	0
34	13,410	84	403,246	134	21	184	0	234	0
35	153,031	85	5,385	135	37	185	0	235	0
36	4,639,662	86	1,003	136	35	186	0	236	20
37	503,078	87	293	137	52	187	0	237	0
38	17,829	88	881	138	3,371	188	0	238	0
39	19,869	89	566	139	103	189	0	239	0
40	24,200	90	3,121	140	0	190	0	240	9,858
41	13,753	91	518	141	60	191	0		
42	568,915	92	454	142	108	192	0		
43	20,059	93	590	143	0	193	0		
44	10,208	94	479	144	21,314	194	0		
45	13,003	95	796	145	258	195	0		
46	9,862	96	46,533	146	0	196	0		
47	105,742	97	1,885	147	0	197	0		
48	3,839,488	98	2,187	148	98	198	0		
49	249,022	99	6,156	149	196	199	0		

TABLE 8 (Cont'd)
TOTAL EXPOSURES AS OF 1998 10 1 11 3 18 130 BY TERM (000)/AGE/PLAN

Age	Exposure	Age	Exposure	Age	Exposure	Age	Exposure	Age	Exposure
0	1,931	20	427,513	40	876,290	60	266,593	80	138
1	889	21	484,524	41	854,268	61	195,797	81	48
2	270	22	542,388	42	842,992	62	142,786	82	112
3	31	23	587,263	43	844,328	63	101,907	83	35
4	12	24	618,645	44	813,838	64	76,365	84	85
5	74	25	669,640	45	810,313	65	36,746	85	86
6	12	26	716,038	46	825,495	66	10,106	86	48
7	1	27	710,681	47	767,718	67	5,696	87	18
8	11	28	704,198	48	741,611	68	3,354	88	37
9	9	29	710,677	49	751,814	69	2,244	89	5
10	9	30	704,719	50	742,630	70	1,488	90	4
11	7	31	735,165	51	638,523	71	1,185	91	4
12	7	32	775,586	52	581,296	72	605	92	68
13	25	33	802,094	53	567,414	73	504	93	0
14	60	34	796,911	54	526,350	74	461	94	3
15	77	35	828,281	55	475,299	75	361	95	5
16	973	36	835,940	56	436,926	76	349	96	2,284
17	5,723	37	844,906	57	381,270	77	216	97	44,797
18	199,039	38	868,273	58	345,960	78	195	98	20
19	332,525	39	902,815	59	297,649	79	123	99	157
		PLAN		EXPOSURE					
		1		4,059,084					
		2		19,978,241					
		3		659,887					
		4		901,997					
		5		1,755,490					
		6		1,470,262					
		TOTAL		28,824,961					

TABLE 9
CREDIT DISABILITY EXPOSURES BY CENTRAL AGE AND TERM (000)

Plan of Insurance is 7-Day Retro										
Term	Age 22	Age 27	Age 32	Age 37	Age 42	Age 47	Age 52	Age 57	Age 62	Age 67
6	2,459	2,626	2,795	3,134	2,647	2,092	1,464	991	696	81
12	14,174	13,009	13,314	13,252	11,259	8,790	6,072	3,838	2,041	449
18	15,809	15,511	15,338	14,808	12,271	9,919	6,428	4,129	1,893	222
24	45,986	50,475	50,113	50,791	43,940	35,934	26,339	15,192	7,462	754
30	19,161	22,394	24,157	24,650	21,697	17,195	12,508	7,311	3,598	436
36	99,029	132,254	156,246	175,421	174,514	155,076	116,350	73,650	35,927	4,419
48	74,261	92,105	108,280	121,094	117,173	104,070	78,709	47,524	22,673	2,283
60	120,663	149,652	177,992	210,993	215,934	192,375	145,668	94,920	31,309	2,310
72	7,134	8,846	10,761	12,119	11,554	10,672	9,037	5,731	1,293	0
84	1,128	4,769	7,380	10,020	8,798	6,518	3,980	2,614	874	0
96	97	184	43	251	210	276	329	286	30	0
108	0	0	0	14	0	116	0	0	0	0
120	73	958	1,528	1,978	3,350	3,172	2,795	984	441	0
TOTAL FOR THIS PLAN			4,054,821							
Plan of Insurance is 14-Day Retro										
Term	Age 22	AGE 27	AGE 32	AGE 37	AGE 42	AGE 47	AGE 52	AGE 57	AGE 62	AGE 67
6	4,520	4,502	4,204	4,012	3,294	2,660	1,947	1,288	748	187
12	45,347	41,463	40,317	39,345	33,194	27,222	18,916	12,887	6,497	949
18	67,187	60,813	58,885	58,462	49,981	40,845	27,948	18,373	8,841	948
24	213,590	225,071	226,910	226,521	202,085	166,913	119,371	75,219	36,003	3,443
30	76,658	86,732	89,264	88,168	81,471	66,081	46,871	28,946	14,579	1,447
36	478,068	554,308	592,306	634,931	609,248	524,699	395,778	254,397	119,020	10,645
48	424,216	462,240	481,877	501,989	486,445	434,516	342,474	222,011	98,048	6,991
60	649,937	685,121	714,674	794,942	797,750	750,036	614,483	398,353	142,042	7,152
72	67,588	72,355	75,797	89,507	88,146	79,794	64,686	42,270	12,621	358
84	7,740	26,603	42,558	56,007	56,821	52,385	42,503	30,397	9,402	351
96	957	2,130	3,599	6,647	8,087	8,452	7,299	11,178	1,846	23
108	517	1,395	1,868	2,948	4,746	4,629	4,165	6,786	1,224	0
120	8,991	29,123	60,006	94,487	123,617	128,562	135,126	72,377	19,462	1,508
TOTAL FOR THIS PLAN			17,619,466							
Plan of Insurance is 14-Day Elimination										
Term	Age 22	Age 27	Age 32	Age 37	Age 42	Age 47	Age 52	Age 57	Age 62	Age 67
6	159	202	247	251	229	238	140	110	49	13
12	2,033	2,242	2,576	2,381	2,088	1,751	1,309	781	492	50
18	2,816	2,895	3,028	2,679	2,575	1,959	1,492	933	453	44
24	11,951	12,110	11,381	10,535	9,548	7,581	5,398	3,366	1,920	117
30	2,594	2,562	2,566	2,732	2,250	2,073	1,450	719	430	20
36	34,718	39,418	40,155	38,632	35,429	29,094	20,784	11,569	6,501	640
48	11,970	15,732	17,144	18,194	18,259	15,783	11,486	7,120	3,094	67
60	6,705	10,989	14,382	17,445	19,277	15,800	11,454	7,645	2,292	79
72	459	661	916	1,238	1,148	1,787	1,029	614	198	0
84	147	125	263	470	802	940	588	654	127	0
96	25	39	94	45	243	274	167	466	56	0
108	0	0	69	0	109	66	91	148	26	0
120	117	729	1,783	2,901	4,436	5,680	4,209	1,689	353	0
TOTAL FOR THIS PLAN			645,356							

TABLE 9 (Cont'd)
CREDIT DISABILITY EXPOSURES BY CENTRAL AGE AND TERM (000)

Plan of Insurance is 30-Day Retro										
Term	AGE 22	AGE 27	AGE 32	AGE 37	AGE 42	AGE 47	AGE 52	AGE 57	AGE 62	AGE 67
6	259	218	286	296	320	304	189	175	46	15
12	1,248	1,440	1,513	1,687	1,847	1,785	1,182	983	395	65
18	1,568	1,498	1,604	1,805	2,033	1,979	1,418	1,024	264	23
24	3,799	3,582	3,772	4,112	4,091	3,976	2,950	1,982	1,178	49
30	2,642	2,330	2,448	2,506	2,212	1,923	1,591	937	486	26
36	8,931	7,984	7,499	9,786	9,574	9,399	6,349	4,810	2,024	237
48	9,382	7,649	8,868	10,586	12,444	12,712	8,326	6,225	2,580	183
60	16,956	16,837	22,114	27,890	32,739	33,581	23,729	16,635	8,611	870
72	1,246	1,411	1,895	2,026	1,896	2,041	1,833	1,238	313	31
84	359	581	980	1,902	2,119	3,130	2,326	1,167	271	0
96	28	125	79	262	142	246	85	85	54	0
108	0	0	0	138	108	151	0	46	0	0
120	360	647	886	1,551	1,841	2,992	1,680	1,263	310	0
TOTAL FOR THIS PLAN			459,415							
Plan of Insurance is 30-Day Elimination										
Term	Age 22	Age 27	Age 32	Age 37	Age 42	Age 47	Age 52	Age 57	Age 62	Age 67
6	369	619	855	1,131	1,264	1,122	858	527	328	71
12	1,788	3,097	4,091	5,509	6,499	6,223	4,698	3,068	1,565	105
18	1,491	2,538	3,138	4,131	4,619	4,314	3,356	2,106	1,221	21
24	6,661	8,421	10,724	13,095	13,903	12,394	9,505	6,700	3,045	147
30	2,557	3,239	3,911	4,910	5,982	5,600	4,053	2,828	1,485	23
36	21,554	25,304	28,997	34,604	39,019	35,710	27,694	17,678	7,986	405
48	35,478	37,853	40,864	44,759	44,025	42,340	32,319	22,040	8,676	305
60	80,490	88,688	95,130	102,545	98,377	94,628	71,124	41,943	13,548	656
72	8,254	15,546	17,171	17,346	16,650	14,081	10,533	7,056	1,606	25
84	528	1,140	1,709	2,548	2,626	1,937	2,232	1,544	582	0
96	72	114	245	431	506	571	360	965	58	0
108	0	0	22	62	137	252	79	472	31	0
120	687	2,107	3,882	6,128	8,864	9,237	8,739	3,930	1,001	53
TOTAL FOR THIS PLAN			1,596,763							
Plan of Insurance is Unknown										
Term	Age 22	Age 27	Age 32	Age 37	Age 42	Age 47	Age 52	Age 57	Age 62	Age 67
6	2,157	1,897	1,724	1,543	1,234	911	492	272	149	41
12	7,229	8,814	9,927	9,828	9,794	7,244	4,749	2,708	1,327	431
18	12,280	8,642	8,203	7,841	6,530	4,867	3,149	1,819	867	134
24	10,166	12,717	14,291	14,609	13,669	10,427	7,016	4,043	2,242	240
30	3,385	3,617	3,695	4,177	4,027	3,316	2,108	1,553	710	34
36	11,504	10,513	11,021	13,242	11,913	10,393	7,009	5,665	5,567	200
48	14,530	15,346	16,817	15,966	15,832	13,717	13,645	8,458	3,716	195
60	17,747	15,905	20,528	22,404	24,527	28,958	20,364	20,413	6,445	116
72	1,106	1,674	1,867	1,728	2,972	1,773	3,237	6,257	6,710	0
84	118	252	285	407	4,205	5,490	6,134	7,546	0	22
96	0	0	16	0	0	15	38	4,982	31	0
108	0	0	0	0	0	0	0	5,735	0	0
120	58	2,468	2,734	4,555	34,792	58,951	61,430	21,640	291	0
TOTAL FOR THIS PLAN			875,020							
TOTAL FOR COMPANY			25,250,841							