State of Utah

Division of Risk Management

Property, Auto, and Liability Rate Review

Prepared by:

Craig J. Nelson, CPCU, ARM-E, CIC, CRM, ERMP, CYB
Managing Principal | Flatiron Risk Advisors, LLC
13723 E Caley Dr.
Centennial, CO 80111
303-328-5980
craig.nelson@flatironrisk.com

May 31, 2016

FLATIRON RISK ADVISORS
LLC
TURNING RISK INTO REWARDS

Executive Summary

Flatiron Risk Advisors, LLC was engaged by the State of Utah, Division of Risk Management (the DRM) to provide an independent review of the rates it charges the customers of its Risk Management Fund (aka, the "pool"). This pool provides, among other coverage and services, property, liability (both general and automobile), and automobile physical damage insurance to its pool members. The pool finances these risks through a combination of self-insurance and insurance, the latter of which is purchased on the commercial insurance market through brokers the DRM has secured for this purpose.

In keeping with our assignment, key questions to be answered by this review include:

- How are the rates determined?
- Are the rates reasonable? (E.g., Are they sufficient to keep the Fund out of the red? Are they in compliance with the law that says the State can have up to 60 days of working capital in reserve for contingencies? Is the State over the 60 days limit?); and
- How are the State's rates communicated to its customers?

As outlined in our report, we find that the Risk Management Fund is a compelling risk financing solution providing broad insurance coverage at very competitive prices. Rates for liability self-insurance are established using actuarially sound practices, and the excess insurance premiums are secured through competitive bidding resulting in advantageous pricing. In our view, the rates confer a coverage/cost benefit upon the customer-agencies difficult to replicate if the agencies were not part of the pool. At the same time, the rates are "reasonable" in that they are sufficient to keep the pool out of the red—assuming the pool is able to collect its approved rates' "impact"—and they are developed with an eye towards the 60-day working capital reserve by collecting only what they need (i.e., no unsubstantiated "cushion" is included). The allocation methodology to the customer-agencies is fair, based on sound underwriting practices, and effectively communicated.

Short-term compliance issues *can* occur relative to the 60-day working capital in reserve for contingencies, as it is today on the property program (Internal Service Fund #6900), mainly due to the timing differences between how the insurance industry prices its products/services, how and when insurance claims are settled, and how the Internal Service Funds are calculated. These differences are *not* due to excess charges beyond what is justified by the rates and are explainable and rectifiable. The bottom line is the Federal working capital calculation, while appropriate for many types of purchases such as consumables and services, does not coordinate well with the timing of the insurance marketplace and unpredictability of claims settlements. This will likely result in continued misalignment, either under or over, because of the Federal guidelines' inherent conditions.

To make the DRM's ratemaking process even better, we recommend considering tweaking your loss coding for future auto physical damage claims to capture claims by type of vehicle, type of customer-agency, and potentially other attributes. We are *not* intimating that a problem exists with the current method, and you can certainly decide to continue as is. However, we do believe this approach may allow you to fine-tune rates in this coverage area, without reaching the point of diminishing returns. In addition, you may want to consider excess or stop loss insurance to protect your auto program from catastrophe events (e.g., fire, flood, vandalism) involving concentration of values, such as in bus yards. Finally, we believe the liability program would benefit from a structured process in which the anticipated cost of the purchased excess premiums is added to the actuarial loss rates prior to finalizing the rate request. This can be accomplished either as a separate line item or possibly by including it in the Administrative Expenses allocation ("ULAE" in the actuarial report), which may integrate most effectively with your methodology. Your actuary can work with you on what would work best.

In summary, based on our experience, the Property, Auto, and Liability rate/premium development of the Fund recognizes the unique attributes of each line of coverage. The processes employed by the DRM provide each customer-agency with a market-competitive, "fair and legitimate" rate and premium, equitably charged relative to the other participants in the pool. However, these equitable rates, and the viability of the pool itself, would be put in jeopardy if not fully funded, and simultaneously put the State's risk manager in non-compliance with State and Federal requirements.

Sincerely,

Craig J Nelson

Craig J. Nelson, CPCU, ARM-E, CIC, CRM, ERMP, CYB
Managing Principal, Flatiron Risk Advisors, LLC

Background and Contextual Comments

Genesis

Utah's Department of Administrative Services (the Department), which includes the Division of Risk Management, is reviewing costs charged the agencies it serves in the wake of the most recent legislative session. During that session, for example, rates and premiums the DRM charges its pool members were approved, but the "impact" of those rates and premiums was not, leaving the Department and the DRM in a quandary. This was especially true of the DRM, as their approved rates, while resulting in a net impact of $1.5 million, actually consisted of a combined charge of $2.5 million to some customer-agencies and a combined reduction of $1 million to others. Without approval of the "impact," as a practical matter, it's likely that those agencies whose loss experience and/or increase in exposures warranted a premium increase, would not have to pay, and those whose loss experience and/or decrease in exposures merited a premium decrease, would not receive their earned reduction.

As a consequence, the Department is asking whether the $1.5 million in "impact" resulting from the approved rates is necessary and has asked the DRM to review its pool-member rates to ensure they are "reasonable" and in compliance with various stipulations, such as the Federal guidelines applicable to Internal Service Funds. By "reasonable," the Department was asking things such as: "Are they (the rates) sufficient to keep the Fund out of the red? Are they in compliance with the law that says the State can have up to 60 days of working capital in reserve for contingencies? Is the State over the 60 days limit?"

Scope

This review is focused on the Property, Liability, and Auto physical damage portions of the Risk Management Fund (the Fund). Other lines of coverage (e.g., workers compensation, fidelity, cyber, etc.) secured by the risk manager or by agencies directly are not included in this review.

Rate Adequacy, Proportionate Share Obligations, and Federal ISF Guidelines

The State's risk manager has at least three important statutory obligations that must be kept in mind when answering the questions that are the subject of this analysis:

1. *Responsibility for Rate Adequacy*

   One of the State's risk manager's responsibilities as part of the Department of Administrative Services is to administer the Risk Management Fund (as outlined in the Utah Code, 63A-4-201), which is a pool created to cover the property, liability (both general and automobile), fidelity, and automobile physical damage loss exposures of the following:

   - State Agencies (by statute, ergo 100% participate)
   - State Colleges and Universities (by statute, ergo 100% participate)
   - Public schools (voluntary participation; currently 100% participate)
   - Charter schools (voluntary participation; current rate is reportedly about 50%).

The Fund provides an insurance policy to each customer-agency outlining the coverage provided by the Fund. In managing the Fund's solvency in support of this insurance, the State's risk manager, under statute 63A-4-101 (2) (f), shall "**manage the fund in accordance with economically and actuarially sound principles** to produce adequate reserves for the payment of contingencies, including unpaid and unreported claims, and may purchase any insurance or reinsurance considered necessary to accomplish this objective" (emphasis added).

2. *Responsibility for Proportionate Share Cost Allocation*

As outlined in the Utah Code 63A-4-201 (2):

(a) The risk manager shall charge to each agency that receives insurance coverage from the Risk Management Fund its proportionate share of the cost incurred based upon actuarially sound rating techniques.

(b) That premium shall include all costs of operating the fund as stated in Section 63A-4-201.

The costs outlined in 63A-4-201 include insurance or reinsurance premiums, costs of administering the fund, loss adjustment expenses, legal expenses, risk control and related educational and training expenses, and loss costs.

3. *Federal Guidelines Regarding Internal Service Funds*

Federal guidelines regarding the pricing and allocation of Internal Service Funds restrict the State's risk manager's flexibility in meeting certain requests in charging, or not charging, for services.

Our analysis contemplates these obligations to the extent the answers would support or conflict with them, or potentially (albeit unwittingly) put the State's risk manager in non-compliance with these obligations.

Government Immunity Act

One important element that lies at the heart of the liability portion of the Fund is the State's Government Immunity Act (GIA), as outlined in the Utah Code 63G-7-101 to 904. The GIA limits the State's personal injury liability on a per-person/per-occurrence basis and property damage liability on a per-occurrence basis (under the GIA's definitions effective 5/10/2016, "personal injury" is defined in the act as "an injury of any kind other than property damage"). Through June 30, 2001, the GIA limited the State's personal injury liability to \$250,000 per person and \$500,000 per occurrence, and property damage liability to \$100,000 per occurrence. With the passage of SB 35, effective July 1, 2001, the government cap for personal injury was increased to \$500,000 per person and \$1,000,000 per occurrence and for property damage liability to \$200,000 per occurrence with an allowance, per Utah Code 63G-7-604 (4), that requires the State's risk manager, in each even year, to increase or decrease the cap based on a calculation of the Consumer Price Index. During the 2006 general session, the Utah legislature, through the passage of SB 113, further increased the per-person and per-occurrence cap for personal injury. The chart below provides a summary of changes to the governmental immunity caps over time.

Effective Date	Property Damage Cap: Per Occurrence	Personal Injury Cap: Per Person	Personal Injury Cap: Per Occurrence
7/1/2001	$200,000	$500,000	$1,000,000
7/1/2002	$213,000	$532,000	$1,065,000
7/1/2004	$221,400	$553,500	$1,107,000
7/1/2006	$233,600	$583,900	$1,167,000
7/1/2007	$233,600	$583,900	$2,000,000
7/1/2008	$248,300	$620,700	$2,126,000
7/1/2010	$259,500	$648,700	$2,221,700
7/1/2012	$269,700	$674,000	$2,308,400
7/1/2014	$281,300	$703,000	$2,407,700
7/1/2016	$286,900	$717,100	$2,455,900

The GIA is important to note because of its use by the State's actuary (currently Deloitte Consulting LLP) in increasing the predictability of the State's overall liabilities for outstanding claims, which aids in the accuracy of rate determination by the actuary and the DRM. Moreover, the GIA cap is incorporated into the DRM's purchase of excess liability insurance over the Fund's self-insured retention for Liability and has the effect of keeping the cost of this insurance very low relative to other organizations without this liability cap.

The GIA does not apply to actions covered by Federal law, such as civil rights offenses or contract disputes, or to out-of-state incidents. In addition, there is concern over erosions to the GIA's protection when it comes to "commercial" activities undertaken by state agencies. Each of these areas can create uncertainty of outcomes, increased volatility, and potentially higher awards beyond the caps. This, in turn, creates budget uncertainty, the need to consider higher excess liability limits, and higher costs.

The Commercial Insurance Marketplace and the State's Budgeting Process

An inherent challenge or mismatch exists for the State's risk manager with regard to the budgeting process and Internal Service Funds guidelines that other purchasers, such as those of consumables or services, likely do not have. This challenge is created in large part by the way the commercial insurance industry functions.

Under State budgeting guidelines, the State's risk manager submits a budget approximately 10-12 months in advance of the fiscal period. However, the commercial property/liability insurance marketplace, for large entities such as the State, will not provide pricing that far in advance, usually doing so only 30-60 days in advance of the State's renewal. This is because each year, the commercial insurance carriers renew their reinsurance treaties, which are a primary driver of *what* they can insure, *how much* they can insure, and at what *price and coverage terms*. This is further complicated by the fact that, on the State's property program, for example, multiple insurance companies are required to provide the underwriting capacity necessary for the State to secure the amount of coverage it needs. With over $32B in property values and a significant earthquake risk in Utah, no one insurance carrier is willing to provide the entire limit the State requires. (We go into more detail on this structure of the Property program in Section I of this report.)

Thus, when the risk manager submits her budget, it is only an educated guess as to what the insurance market is going to come back with at the time renewal negotiations occur. She is not able to negotiate a firm price at budget time. In a "soft" market when underwriting capacity is plentiful and prices are holding steady or decreasing, she has an easier time of being on target with the budget estimate or even provide an estimate that is higher than it actually turns out to be when in a declining market.

However, intervening national or international events outside of the State's control, such as economic downturns, large catastrophic events (such as a Cat 5 hurricane) that impact capacity and cost in the global insurance marketplace, or adverse loss experience for the State's properties in particular, can drive up costs when the premiums are actually negotiated, sometimes significantly. A good example of this is what is occurring now with the CV Starr excess liability program. Because of adverse loss experience nationally with lawsuits targeting police departments, CV Starr has decided to withdraw from providing coverage for the State (or any state), even though the State has had excellent loss experience with CV Starr and has not seen the kind of lawsuit activity being experienced elsewhere. It's uncertain, at this point, a) which underwriters are still willing to undertake this risk and provide coverage for the State, and it appears the market is very limited (e.g., Britt, Old Republic, Lexington, and Munich Re) and b) what the cost and terms of this capacity will be. It could be that the State's cost increases significantly for this protection, but this will not be known until sometime in June, days before the next fiscal period, for which, of course, the rates have already been set by the State. If the price does increase significantly, this creates a conundrum for the DRM because the rates were set/approved last year.

The self-insured portion of the Fund is less volatile than the commercial insurance marketplace from the perspective that the State's own loss experience dictates ultimate cost projections, but even then, the timing of the actuarial report, which helps to establish the budget for this portion of the program, is an annual event not conducive to the State's budgeting process.

The point to keep in mind, therefore, when evaluating the 60-day Federal working capital requirement or limit is that risk management does not *intentionally* try to keep excess funds in reserve. However, the timing differences between the budget cycle and the commercial insurance marketplace, in particular, will create differences in amounts—*no one* can predict with 100% accuracy what their premiums from the marketplace will be 10 months in advance of their renewal, absent a rate guarantee. And rate guarantees are not available for a program as large/complex as the State's and with the State's earthquake risk.

The Insurance Dollar

An important concept that underlies any discussion of insurance ratemaking and rate adequacy is the "Insurance Dollar." This can be depicted as follows:

Typical Insurance Program Dollar Split	
Fixed Costs (35%): • Audit, Acquisition, Administration • Boards, Bureaus, Fees • Insurance/Reinsurance • Claims Management • Profit	**Provision for Losses (65%)** • Direct claims costs/payouts • Allocated claims expenses (e.g., attorneys' fees)

This is a typical relationship between fixed costs and the provision for loss. However, it can differ by line of insurance. For example, for Liability, the fixed costs may be higher due to reinsurance costs, which can make the ratio more in the 45/55 range or even higher. For Property, the 35/65 ratio is fairly typical. Note that the profit load for an insurance carrier in this insurance dollar is usually 5% (with additional profit coming from beating the provision for loss), so for a pool, which does not have a profit load, the ratio for Property becomes 30/70, meaning you can hold more losses in your insurance dollar. We point this out for two reasons: 1) it emphasizes that *any* insurance program or pooling arrangement requires a degree of fixed expenses to run it properly, and these costs are not inconsequential; and 2) it gives us a quick "ballpark" check on program efficiency. For instance, the State's program dollar looks something like this:

The Fund's Dollar Split	
Fixed Costs (16%): • Administration • Claims Management	**Provision for Losses (84%)** • Direct claims costs/payouts • Allocated claims expenses (e.g., attorneys' fees)

We determine this by first looking at program losses within the retained or pool layer. If projected losses (not including ULAE) are, say, $20M for the Property/Auto/Liability program pool, then we can use $11M as a kind of benchmark for fixed expenses (35% of $31M, since $20M is 65% of $31M). Fixed expenses of more than $11M would be excessive, while fixed expenses of less than $11M would indicate good operational efficiency. As you will see in the discussion on rate adequacy, expenses attributable to the State's administration of the program are about $3.7M, significantly lower ($7.3M) than the benchmark amount and therefore highly efficient, representing a ratio of around 16/84 v. 35/65. Note that we do not include the cost of excess insurance in this quick-check comparison, as that does not apply to this comparison of the working layer that is the subject of these losses, and those premium costs are "pass throughs." This discussion of a "quick check" of program efficiency can be summarized as follows:

Projected Losses	Expected Expenses	DRM Expenses	Savings
$20M	$11M	$3.7M	$7.3M

The Pension Fund Analogy

One final contextual point we would like to make concerns the long-term viability of the Fund or any pooling arrangement, for that matter. Much like a pension fund, the pool builds up dollars set aside to pay the current (discounted) value of future known liabilities. Even though the amounts are carefully calculated by the actuary, the uninitiated can sometimes assume that excess cash must naturally be sitting "in the bank." However, as has been repeated many times in the pension world, this view often leads to under-funding and even putting the pool at risk. We see the State's current discussion about not funding the rate "impact" as headed in this direction.

While undoubtedly well intentioned, we did note one official communication, dated May 3, 2016, in which the State official indicated that, regarding DAS Rates, "agencies will need to absorb rate increases related to risk management. On the liability side, agencies can reduce pressure on future rate increases by engaging in initiatives that help to prevent claimable liability events (e.g. slips and falls by employees)." Beyond the unfortunate error in savings example (an injury to an employee is a workers compensation incident, not a liability incident), the communiqué fails to recognize that the projected losses already contemplate efforts on the part of DRM and the agencies in safety and loss control activities, plus the fact that the insurance premiums are what they are. Denying the funding puts the loss fund and insurance purchases in jeopardy, and this would be most unfortunate, in our view. Additionally, the actuarial report is based on an expected loss confidence level of 50%, meaning that half the time, losses will be more than expected, and the other half, less than expected. It is *extremely* unlikely that any organization ever hits its expected losses "on the nose." The unpredictable nature of risk is such that the Fund could easily find itself with losses of more than the expected amount, exacerbating a less-than-sufficient funding situation. (Incidentally, the reason an actuary typically uses a 50% confidence level for expected losses is to avoid accumulating loss dollar set-asides higher than necessary over time. The idea is to have adequate, not excessive rates.)

The big picture is that it appears to us that the State has an exemplary Risk Management Fund and should work to ensure it continues to receive the funding it requires. We felt we would be remiss in not mentioning this and urging the State not to fall prey to the same kinds of actions that not only put pension funds across the country in major difficulties, but which have affected many insurance companies over the years, too, forcing them into insolvency.

Section I: How are the rates determined?

As outlined in Utah code 63A-4-101 and 201, through the creation of the Risk Management Fund, the DRM issues insurance policies to customer-agencies, typically with low deductibles, which are easily absorbed by the individual agency, should an insured event occur. However, as is typical of a pool arrangement, the DRM secures financial backing for these policies (Liability, Property, and Auto Physical Damage) through a combination of self-insurance and insurance, optimizing the trade-off between retained losses and insurance premiums for the benefit of the pool and its customer-agencies. The rates charged the customer-agencies for these policies are a *direct reflection* of the costs involved in this funding arrangement. DRM administrative expenses are allocated among these three policies at a rate of 60% Liability, 30% Property, and 10% Auto.

Liability Insurance Policy

For the liability portion of the pool, which covers both General Liability and Auto Liability, the first $1,000,000 per occurrence is a self-insured retention (not subject to an aggregate), over which the State secures an excess policy with a $10,000,000 limit per occurrence, with aggregate limits as outlined in the policy issued to the State. Therefore, three cost components underlie the rate determination: self-insured losses, premiums paid to the excess insurance carrier, and DRM administrative expenses allocation.

An independent, licensed actuary (Deloitte Consulting LLP), who reviews in detail the liability losses that have occurred, projects the expected losses in the self-insured layer based on actuarially sound methodology. We have reviewed the actuary's report and have found it to be in keeping with industry best practices. This expected loss component makes up the largest portion of the premium charged to customer-agencies for liability insurance. The actuary includes the 60% DRM administrative expenses in the expected loss forecast under Unallocated Loss Adjustment Expense (ULAE).

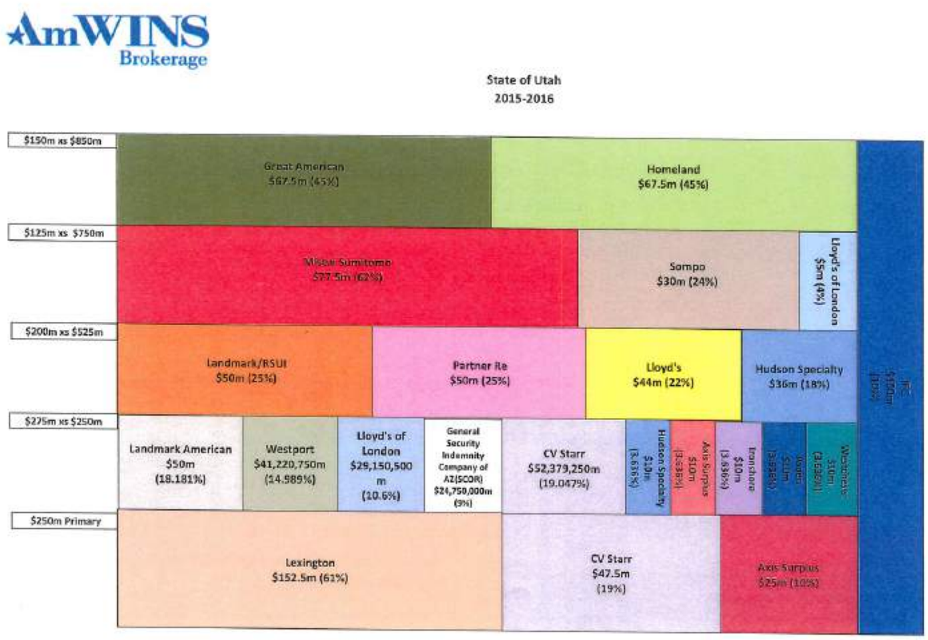
Starr Indemnity & Liability Company, for the period 7/1/2015 to 7/1/2016, provides the State's excess liability policy (as described above) at a premium of $586,500. This premium is a pass-through cost to the pool participants. However, for FY2017, this premium charge was not included in the ratemaking process and not included in the DRM administrative expenses provided to the actuary for use in ULAE calculation (see page 5 of the Deloitte actuarial report dated 7/23/2015). We recommend that this be coordinated with the actuary in future reports to determine how best to include excess liability insurance in the premium allocations to the customer-agencies.

The actuary has worked with the DRM to create a "fair and equitable" allocation methodology that takes into account each customer-agency's exposure base and actual loss experience. (Refer to Appendix G "white paper" dated May 9, 2013 from Deloitte to the State's risk manager in which they describe this methodology in greater detail.)

Property Insurance Policy

For the Property portion of the pool, the State secures a $1B property insurance "tower," subject to a sublimit of $525M for Earthquake coverage. This limit overlays the entire State portfolio of over $32B in insurable values. This is a common practice for portfolios of this size, where the commercial market does not have the capacity to provide a $32B limit, but instead focuses on how much property would be at risk during any one event (fire, windstorm, flood, earthquake, and so on). Earthquake is sub-limited to $525M, as that is all the capacity reasonably available in the marketplace. The deductible is $1,000,000 per occurrence, subject to an annual aggregate (or cap) of $3,500,000, which has the effect of creating a known maximum exposure to losses, subject to maintenance deductibles described below. Accordingly, unlike the liability program, an actuary is not required to predict losses in this layer. A "maintenance" deductible of $1,000 per loss applies prior to losses counting against the aggregate. Once the aggregate is met, the maintenance deductible becomes $10,000 per loss. (For Earthquake and Flood losses, the maintenance deductible before and after the aggregate is $50,000 per loss.)

This is a complex arrangement requiring numerous insurance carriers to "fill out" the capacity for the placement. No one carrier has the capacity or the interest to back a limit of this size. The placement chart for the program looks like this:



For the July 1, 2015 to July 1, 2016 policy term, the premium for this tower was $7,607,272, against a total insured value amount of $32,346,605,918, which equates to a rate of just over 2 cents per $100 in insurable value. As we will elaborate on in the next section, this is an extremely competitive price. Like the premium for the excess liability policy, the premium is a pass-through to customer-agencies.

This Property premium is made up of pricing by layer as shown in the exhibit on the next page:

State of Utah
7/1/2015 Effective

Carrier	Policy Number	Authorization	Layer Share	Quoted Layer	Share Premium
Primary $250,000,000, Incl FL, EQ, & Terrorism (100M High Hazard Flood)					
Lexington Ins. Co	019946850	$ 152,500,000	61.0%	$ 6,078,632	$ 3,707,966
Chubb Custom Insurance Company	44681227-04	$ 15,833,333	6.333%	$ 5,484,616	$ 347,359
Starr Surplus Lines Insurance Company	SLSTPTY10757415	$ 15,833,333	6.333%	$ 5,484,616	$ 347,359
General Security Indemnity Company of AZ	T0234451502075	$ 15,833,334	6.333%	$ 5,484,616	$ 347,359
AXIS Surplus Insurance Company	EAF787963-15	$ 25,000,000	10.0%	$ 5,484,616	$ 548,462
IFC	AMW-150352	$ 25,000,000	10.0%	$ 5,484,616	$ 548,462
Totals		**$ 250,000,000**	**100.0%**		**$ 5,846,967**
$275,000,000 xs $250,000,000, Incl FL, EQ, & Terrorism excluding High Hazard Flood					
Certain Underwriters at Lloyd's of London	B1230AP65058A15	$ 29,150,000	10.6%	$ 1,409,952	$ 149,455
Landmark American Insurance Company	LHD393072	$ 50,000,000	18.2%	$ 1,409,952	$ 256,355
Hudson Specialty Insurance Company	HCS101238	$ 10,000,000	3.636%	$ 1,409,952	$ 51,271
AXIS Surplus Insurance Company	EAF700304-15	$ 10,000,000	3.636%	$ 1,409,952	$ 51,271
Aspen Specialty Insurance Company	PXA6VDG15	$ 10,000,000	3.636%	$ 1,409,952	$ 51,271
Westchester Surplus Lines Insurance Company	D37387848 005	$ 10,000,000	3.636%	$ 1,409,952	$ 51,271
Ironshore Specialty Ins. Co	002068701	$ 10,000,000	3.636%	$ 1,409,952	$ 51,271
General Security Indemnity Company of AZ(SCOR)	10F156629-2015-1	$ 24,750,000	9.0%	$ 1,409,952	$ 126,896
Chubb Custom Insurance Company	44681227-04	$ 17,459,750	6.349%	$ 1,409,952	$ 89,518
Starr Surplus Lines Insurance Company	SLSTPTY10757415	$ 17,459,750	6.349%	$ 1,409,952	$ 89,518
General Security Indemnity Company of AZ	T0234451502075	$ 17,459,750	6.349%	$ 1,409,952	$ 89,518
Westport Ins. Co - *admitted*	NAP 0452287-0	$ 41,220,750	15.0%	$ 1,409,952	$ 211,343
IFC	AMW-150352	$ 27,500,000	10.0%	$ 1,409,952	$ 140,995
Totals		**$ 275,000,000**	**100.0000%**		**$ 1,409,953**
$200,000,000 xs $525,000,000, Excl FL & EQ, Incl Terrorism					
Landmark American Insurance Company	NHD393071	$ 50,000,000	25.0%	$ 180,000	$ 45,000
Hudson Specialty Insurance Company	HCS101239	$ 36,000,000	18.0%	$ 180,000	$ 32,400
Partner Re Ireland Insurance Ltd	F550189-15	$ 50,000,000	25.0%	$ 180,000	$ 45,000
Certain Underwriters at Lloyd's of London	B1230AP65058B15	$ 44,000,000	22.0%	$ 180,000	$ 39,600
IFC	AMW-150352	$ 20,000,000	10.0%	$ 180,000	$ 18,000
Totals		**$ 200,000,000**	**100.0%**		**$ 180,000**
$125,000,000 xs $725,000,000, Excl FL & EQ, Incl Terrorism					
Mistui Sumitomo Insurance Co of America - *admitted*	EXP7000060	$ 77,500,000	62.0%	$ 80,000	$ 49,600
Lloyds of London	CNP-151702	$ 5,000,000	4.0%	$ 80,000	$ 3,360
Sompo Ins. Co of Japan - *admitted*	PEP48816P0	$ 30,000,000	24.0%	$ 80,000	$ 19,392
IFC	AMW-150352	$ 12,500,000	10.0%	$ 80,000	$ 8,000
Hudson Specialty Insurance Company		**$ 125,000,000**	**100.0%**		**$ 80,352**
$150,000,000 xs $850,000,000, Excl FL & EQ, Incl Terrorism					
Homeland Ins. Co	795 003370	$ 67,500,000	45.0%	$ 90,000	$ 40,500
Great American Ins. Co of New York - *admitted*	CPP522180805	$ 67,500,000	45.0%	$ 90,000	$ 40,500
IFC	AMW-150352	$ 15,000,000	10.0%	$ 90,000	$ 9,000
Totals		**$ 150,000,000**	**100.0%**		**$ 90,000**

Premium	**$ 7,607,272**
TIV	**$ 32,346,605,918**
Rate	**$ 0.0235**

The total Property premium to be charged takes into account these Property premiums, other Property-related policy premiums (e.g., Boiler & Machinery and Crime/Fidelity), an amount for estimated or expected paid deductible losses during the fiscal period, and an allocation for DRM expenses (30%). In addition, the DRM makes adjustments for any pre-paid insurance expenses and anticipated payments for the DRM's Sprinkler Rebate Program, which returns money to customer-agencies for participating in proactive measures related to their building sprinkler protection. Finally, the DRM reviews its Net

Retained Earnings standing to determine whether an adjustment is necessary to maintain the 60-day ISF reserve maximum requirement, as much as this can be predicted this far in advance.

Premiums are allocated to each customer-agency by a formula that takes into account not only the value of the buildings/property to be insured, but also individual risk characteristics, such as construction type, year built, sprinkler protection (y/n), alarm protection (y/n), and incentives for such things as participating in flow-test programs to reduce risk. This is an inherently "fair and equitable" approach that recognizes individual customer-agencies' risk profiles.

Automobile Physical Damage Policy

The Automobile coverage provided by the Fund is for physical damage to vehicles, typically known as Comprehensive and Collision coverage. The coverage is 100% self-insured by the pool; no insurance or reinsurance provides any stop-loss protection. This is not unusual given the generally low severity, high frequency nature of this coverage, making loss forecasting more predictable. Administrative allocation to the Automobile coverage is 10%. For FY2017, the customer-agency deductible for this policy has been approved for "up to $1500." However, the Fund will apply a deductible of $750, if the customer-agency cooperates in the claims "best practices" outlined and communicated by the DRM. The cost for the deductibles is borne by each customer-agency at the time an incident occurs and is paid for, by design, out of their own operating budget.

As outlined in H.B.8, the FY2017 rates for Automobile Physical Damage Premiums are as follows:

Public Safety Vehicle (less than $35,000 in cost)	$175 per vehicle, per year
Higher Education (less than $35,000)	$125 per vehicle, per year
Other State Agency (less than $35,000)	$150 per vehicle, per year
School Bus	$200 per vehicle, per year
School District (less than $35,000)	$ 50 per vehicle, per year
Vehicle Valued More than $35,000	.80 per $100/value, per year
Other vehicles: State and Higher Education	$ 75 per vehicle, per year
Other vehicles: School District	$ 50 per vehicle, per year

These rates were promulgated a number of years ago by the DRM and undergo minimal adjustment from year-to-year, if any. A recent change occurred in FY2015, for example, when the School Bus premium was increased from $100 to $200 per year.

Cost is allocated to each customer-agency based on the number of vehicles they have of each type. Total premium collected by the DRM, based on these rates, runs about $2M per year. Expenses against this premium are the 10% Administrative allocation (approximately $365K) and losses. These revenues and expenses have balanced out at a fairly predictable rate for at least the past 5 years, so the rate process is working as desired.

One potential idea the DRM may want to consider regarding the Automobile Physical Damage ratemaking process in the future is to begin to collect loss data by coding it with certain characteristics. This might include type of vehicle and type of agency. At this point, it's hard to predict what the data will tell you, but it may lead to increased ability to fine-tune rate amount and categories, with the caveat that you would need to apply judgment as to how far to go with this. You can reach the point of diminishing returns by trying to fine-tune these rates too much. However, this is certainly not a necessity, as this program's premium and rate structure is clearly meeting the needs and wishes of your customer-agencies.

Another area the DRM may want to evaluate is value concentration. For example, some schools or school districts are known to have bus yards, which can contain a large aggregation of values, susceptible to major losses such as fire, flood, or vandalism. It may be that you would want to purchase excess insurance for this value concentration exposure or find a way to include it under your existing Property insurance program.

Conclusion

Based on our experience, the rate development for each line of coverage is in keeping with the needs and nuances of each. Importantly, these processes provide each customer-agency with a "fair and equitable" (also called "fair and legitimate") rate and premium, equitably charged relative to the other participants in the pool.

Section II: Are the rates reasonable?

In the context of insurance rates and whether they are reasonable (i.e., "economically and actuarially sound"), three questions need to be considered, namely:

1. Economical: Compared to what?
2. Actuarially sound: Will amounts collected be sufficient to fund losses now and in the future?
3. Do they comply with 60-day working capital guidelines?

Economical Rates?

Whether insurance is economical depends both on how it compares to the market in general (e.g., could you buy it less expensively elsewhere?) and, importantly, what coverage is provided and by whom. Commercial Insurance, in particular, is rarely equal in terms of the coverage grants provided from one carrier to another, plus the financial strength and ability to honor the future commitment that lies at the heart of an insurance contract is of paramount importance. What looks like a "cheap" price from a lower-rated carrier may end up an empty promise and a complete waste of money.

One thing that stands out to us about the Fund's rates for its customer-agencies is that the rates are very competitive compared to the market, the coverage they represent provides broad—in some cases extraordinarily broad—protection, and they are backed by a solid financial foundation. Here are two examples to illustrate the point regarding the cost/coverage/service combination:

A. The Property program has uncommonly broad coverage and is backed by leading insurance carriers with high Best's ratings. For instance, the policy:

- Covers all property of an insurable nature. The policy form most carriers use (created by the Insurance Services Office or ISO) includes a list of property *not* covered.
- Covers "all risk of physical loss" from any cause.
- Covers cost to "replicate or restore" buildings on the Utah Historical Registry, which could be an invaluable coverage enhancement should one of the buildings be damaged.
- Includes coverage for any "course of construction" exposure up to $100M in limits, with a $50K deductible.
- A flat deductible of $50K applies earthquake or flood losses; no separately described percentage or coinsurance deductible—which typically falls in the 2% to 5% range or more—applies. This is significant because let's say the Capitol, valued at $500M, were to suffer a total loss due to an earthquake. Under the State's program, the deductible would be $50K versus $10M to $25M (2% to 5%) as frequently stipulated in the market.

At the same time, pricing for this broad coverage is low to very low compared to the market. To cite some examples, we looked at the cost allocation of a random set of State Agency properties and compared them to our best estimate (facilitated by the State's property insurance broker) of what the market would charge on a stand-alone basis for these locations, using a $1,000 deductible that the customer-agencies currently are responsible for. Note that it was not possible to get a complete apples-to-apples comparison, but it is unlikely the coverage grants from the market would be as broad as the State's program, nor would the agency get a $1,000 deductible for Earthquake coverage. The next table is a comparison of Fund Premium to Market Premium, with the percentage below market the Fund provides.

Asset Name	Asset Owner	Value	Fund Premium	Market Premium	Variance % to Market
Wasatch HS	Wasatch Schools	$82,240,000	$29,952	$65,792	-55%
Union Middle School	Canyons Schools	$31,760,232	$19,729	$31,760	-38%
Davis Campus Bldg	Weber State	$23,965,591	$8,139	$23,966	-64%
Univ. Guest House	Univ of Utah	$18,800,236	$1,831	$18,800	-90%
Armory W. Jordan	National Guard	$17,900,000	$4,803	$17,900	-73%
Whittier Elementary	Granite Schools	$17,000,000	$2,421	$17,000	-85%
Bear Lake Rest Area	UDOT	$461,999	$153	$924	-83%
W Baseball Club.	Grand Schools	$445,200	$360	$890	-59%

You can also refer to Appendix F to view a letter from Moreton to the State's risk manager regarding a premium indication to split out the Department of Natural Resources, with its 850 properties, separately from the Fund. The cost to do so is estimated to be approximately $526,000, almost 68% more than the $313,543 the DNR is currently paying to the Fund. You can see that is consistent with the examples shown above.

In addition, the Auto Physical Damage rates charged by the State to its customer-agencies are likewise very inexpensive. We look at those rates and see, for example, a Bus rate of only $200, when in the market that could be as high as $2,000. The rates for Private Passenger Vehicles are likewise significantly lower than the market.

B. The DRM works to ensure that the losses that ultimately generate the rates are kept to a minimum through proactive loss control, safety, and claims management practices. For example, on the property side, the DRM loss control personnel have created program around flow-control testing of sprinkler protection (with incentives for reduced premiums, as mentioned earlier). An example on the liability side is education and training around reducing losses to the public due to trip and fall hazards. From a claims management perspective, the DRM claims team operates at a cost significantly lower than what a third-party administrator would charge, plus the fact that legal assistance is provided directly by the State attorney general's office means a significant reduction in legal costs to the pool. (Estimates provided by Perlinski & Company's relatively recent audit of the DRM's operational practices indicate roughly a 33% cost savings through the DRM handling these processes internally versus using an outside party.) Moreover, the DRM claims team has created a number of specific programs designed to reduce the costs associated with auto accidents. To cite one example, they have created a network of approved repair shops throughout the state, which provide "PPO-like" discounts on parts and labor.

In addition to inexpensive rates and broad coverage, the pool backs this protection, either through appropriate funding or through excess insurance purchased from financially secure insurance carriers, giving the customer-agencies the assurance that the coverage will respond when and if it's needed. Carriers backing the State's Liability and Property programs include the following carriers and are rated either "Superior" or "Excellent" by Best's, as you can see from the table. Generally speaking, we recommend doing business only with carriers rated "B+" or better, with "A" or better preferred. We also generally recommend, particularly for large organizations like the State, that the Financial Size be category "X" or better. Here again, the State meets this recommendation.

Carrier	Financial Strength Rating	Financial Size Category	Opinion Outlook
CV Starr	A	XIV	Stable
Lexington	A	XV	Negative
AXIS	A+	XV	Stable
Landmark American	A+	XIII	Stable
Westport	A+	XV	Stable
Lloyds of London	A	XV	Positive
General Security/SCOR	A	XV	Positive
Hudson Specialty	A	XV	Stable
Ironshore	A	XIV	Negative
Aspen	A	XV	Positive
Westchester	A++	XV	Negative
Partner Re	A	XV	Stable
Mistui Sumitomo	A+	XV	Stable
Sompo Japan	A+	XV	Stable
Great American	A+	XIV	Stable
Homeland	A	X	Stable

A guide to these Best's ratings categories is outlined below.

Financial Strength Rating

Best's assigns a "Financial Strength" rating to each carrier it reviews. A qualitative rating, it is a reflection of that carrier's financial strength and ability to meet its ongoing insurance policy and contract obligations. This is considered the most important of the Best's ratings, since it comes only after a thorough review by Best's of an insurance company's management practices, reinsurance purchases, financial strategy, high level underwriting practices, and so forth.

Rating Symbol	Rating Category
A+, A++	Superior
A-, A	Excellent
B+, B++	Good
B-, B	Fair
C+, C++	Marginal
C-, C	Weak
D	Poor

Financial Size Category

Best's assigns this category to all insurance companies to enhance the usefulness of the preceding rating. A quantitative rating, this category reflects the capital, surplus, and conditional reserve funds of the company in millions of U.S. dollars. It is an indication of an insurance carrier's financial capacity to provide the necessary policy limits to insure the risks it underwrites. A "risk" as large as the State requires insurance carriers with significant financial capacity.

Category	Description (millions)
I	Less than 1
II	1-2
III	2-5
IV	5-10
V	10-25
VI	25-50
VII	50-100
VIII	100-250
IX	250-500
X	500-750
XI	750-1,000
XII	1,000-1,250
XIII	1,250-1,500
XIV	1,500-2,000
XV	Greater than 2,000

Opinion Outlook

Best's provides an "Opinion Outlook" determination to supplement the assigned rating as an indication of the potential future direction of the rating over an intermediate period, generally defined as the next 36 months.

- "Positive": Indicates that the insurance company is experiencing favorable financial and market trends, relative to its current rating. If these trends continue, the company has a good possibility of having its rating upgraded.
- "Stable": Indicates that the insurance company is experiencing stable financial and market trends, and that there is a low likelihood the company's rating will change over an intermediate period.
- "Negative": Indicates that the insurance company is experiencing unfavorable financial and market trends, relative to its current rating. If these trends continue, the company has a good possibility of having its rating downgraded.

Actuarially Sound?

To ensure the Fund is both "economically and actuarially sound," the DRM has created a program as described in Section I, which combines both self-insurance and insurance, to optimize the trade-off between retained losses and insurance premiums. For the self-insured liability portion of the program, in keeping with industry best practices, the DRM uses the services of a licensed actuary to establish loss reserve estimates annually in order to ensure the Fund is collecting what is necessary to remain solvent (i.e., "rates sufficient to keep the Fund out of the red"). We have reviewed the Deloitte actuarial report dated July 25, 2015 and have found that it appropriately addresses the future liabilities associated with the Liability program and recommends the proper level of funding. The insurance purchased by the pool to keep retained losses within the pool's financial capacity is, as mentioned above, secured at very competitive pricing from financially sound insurance companies.

Actuarial services are not required for the property or auto physical damage portions of the Fund because these exposures have much shorter loss settlement periods or “tails” and, in the case of the property program, have a defined aggregate liability, currently $3.5 million. The DRM has demonstrated an ability to estimate loss experience and collect the required amount of funding, without being excessive. This is evidenced by the year-over-year retained earnings analysis of these two lines of insurance in which, except for unusual circumstances involving claims settlement or claims recovery payments from insurance carriers, the DRM has been able to maintain funding within ISF guidelines.

Do Retained Earnings Meet 60-day Requirement?

The DRM is constrained, in addition to creating an economical and actuarially sound program, to ensure that working capital (“retained earnings”) is kept within the 60-day requirement set by Federal guidelines pertaining to Internal Service Funds. As stated earlier, the DRM *does not* deliberately build excess cash reserves into its pricing models for expenditures. (This is not to be confused with the forecasting of liabilities for example, in which money is set aside to pay for future payment of incurred and incurred-but-not-reported liabilities, which the actuary forecasts each year so that the DRM can factor these into rate/premium requests.)

If you look at the “Reconciliation of Retained Earnings Balance to Federal Guidelines For Year Ending June 30, 2015” (dated 3/3/16), which the State Department of Finance provided to us, you will note the following:

	ISF 6900—Property	ISF 6910—Auto	ISF 6920—Liability
Balance	$ 3,808,992	$ 137,285	$ 1,361,082
Allowed Balance	2,002,224	299,715	2,571,726
Excess/(Under)	1,806,768	(162,430)	(1,210,644))

As you can see, as of June 30, 2015, the Internal Service Funds for Auto and Liability are actually under the requirement (though still in a positive cash position), whereas the Property ISF is in an excess position. This is not a function of over-charging, but rather a good example of the vortex in which risk management must necessarily operate, notably insurance market predictions, claims payout amount and timing predictions, and insurance recoveries. In fact, multiple insurance recoveries (i.e., reimbursements from the carriers for losses in excess of the deductible) hit in FY2015. Because the timing of these recoveries is very difficult, if not close to impossible to predict that far in advance, there are times when they can cause a temporary “excess” in the allowed balance. When that happens, the DRM submits a plan to reduce the Retained Earnings amount, which the Federal guidelines typically allow two years to correct. Such is the case for this FY2015 excess.

Incidentally, under the Federal guidelines, each of these cost categories stands unto itself; the funds in them are not fungible, where the excess in one can be used to offset the under-reserve in another. In addition the Federal guidelines are not concerned with an ISF being in an under-reserved position and thus do not require any action in those instances.

Conclusion

From our review, we are confident in the methodology the DRM employs to try to accurately forecast claims, premium, and incentive reimbursements associated with these three lines of coverage in an effort to ensure compliance with the 60-day requirement and, barring unforeseen timing variables, is generally successful in doing so.

Section III: How are the State's rates communicated to its customers?

The DRM uses several methods to communicate its rates to its customer-agencies and to involve these customers, in general, throughout the ratemaking process.

Rate Committee

A primary vehicle for communicating rates begins with the Rate Committee. This committee is comprised of representatives from the Governor's Office, State Finance, Technology Services, and other department executives who serve on the committee on a rotating basis. The committee meets in the fall of each year. Prior to this meeting, a "notice to the public" is provided to all State agencies, and a notice is also posted on the State "Public Notice Website," thus giving the customer-agencies an opportunity to review and comment on the proposed rates. From the perspective of the DRM, the purpose of the committee is for the State's risk manager to propose the DRM's new rates and to discuss them in an open forum. The committee meets up to three times to review the rates and commentary, and make modifications, as needed or warranted. Once the committee approves the rates, they are submitted both to the Governor's office and to the Utah State Legislature.

Detailed Invoicing

Invoices to the customer-agencies detail the coverage and exposure data that supports the premium charge. Take, for example, the property invoicing.

Prior to receiving an invoice, the customer-agency participates in an annual "Statement of Value" or "SOV" update. They do this by logging on to the DRM Riskonnect portal created specifically for this purpose. The portal allows each customer-agency to update their respective property listing in terms of values (building, equipment, and contents) and attributes (e.g., square footage increases, newly acquired property, sold property, and so forth). Once the customer-agency completes their input into the Riskonnect system, the DRM reviews the data, clarifies with each customer-agency any questions, and then uses this data to generate invoices. See Appendix E for a sample Property invoice. This appears to us to be clearly communicated with an appropriate level of detail.

Risk Watch Newsletter

The DRM distributes a newsletter, Risk Watch, to its customer-agencies addressing a variety of risk-related topics, including commentary and/or information on rates and premiums and the risk-related activities that affect them. See Appendix H for an excerpt from one of these newsletters.

Involvement in Loss Control, Safety, and Claims Management Best Practices

The DRM makes it clear to its customer-agencies that, as a pool, each agency can help reduce the overall costs to the pool and to their own costs by proactively participating in the loss control, safety, and claims management "best practices" espoused and taught by the DRM. DRM professionals in each of these areas work regularly with the customer-agencies to provide education, training, guidance, and monitoring of these best practices.

Conclusion

In addition to creating several proactive opportunities for its customer-agencies to be involved in the ratemaking process, the DRM appears to be responsive to individual customer-agency requests for information or clarification. The DRM also creates educational opportunities and incentives to help its customers understand how to reduce their costs now and in the future. These communication methods, to us, all speak to a program that is functioning well and with full transparency to its customer-agencies.

Section IV: Conclusions and Recommendations

Based on our review of the Property, Auto, and Liability rates the DRM charges its customers of the Risk Management Fund, how these rates are developed and allocated, and how they are communicated, we have concluded:

1. The rates and premiums are developed using industry best practices and, in the case of the Liability program, are based on actuarially sound methodology. The premium distribution based on these rates is done in a thoughtful manner, resulting in "fair and legitimate" premiums for each customer-agency, which receives an equitable charge relative to the other participants in the pool.
2. The rates and premiums are reasonable in that they meet the tests of being both economical and actuarially sound. Assuming they are fully funded, they are sufficient to keep the Fund out of the red, yet still within compliance of ISF guidelines surrounding the 60-day working capital reserve maximum.
3. While the State is currently over the 60-day limit with regard to its Property account (ISF 6900), we did not find this current excess is due to unsubstantiated charges beyond what is justified by the premium, loss, and administrative expenses. Excess funds are not intentionally built into the ratemaking process. Instead, timing differences between the State's budgeting process and how the insurance marketplace operates, how and when claims are settled, and how Internal Service Funds are calculated, will inevitably result in short-term misalignment, depending upon the day the ISF calculation occurs. We did note that Federal guidelines allow the DRM two years to bring excess funds into compliance and that the DRM has a plan to do so.
4. The rates are communicated to the Fund's customer-agencies in an open, transparent, detailed manner, with several opportunities for the customers to interact with the DRM throughout the process, from ratemaking to billing to ongoing support to newsletters.
5. Rate equity and ongoing Fund viability would be put into jeopardy if the rates are not fully funded, which, in our view, puts the State's risk manager into a non-compliant position with regard to State requirements concerning rate adequacy and proportionate share cost allocation, and Federal guidelines surrounding Internal Service Funds.

Summary of Recommendations

1. Consider tweaking your loss coding for Auto physical damage to capture claims by type of vehicle, type of customer-agency, and potentially other attributes.
2. Evaluate excess or stop loss insurance to protect your Auto program from catastrophic events involving concentration of values, such as bus yards.
3. Create a structured process to include the anticipated cost of excess liability insurance in the actuarial loss rates prior to finalizing these rates with the rate committee. We suggest involving your actuary in a solution that would integrate most effectively with your ratemaking methodology.

Section V: Appendices

A. List of Interviewees
B. Risk Management Financial Reporting Chart
C. House Bill 8 (Risk Management Excerpt)
D. Risk Rate Impact
E. Example Communication: Property Premium
F. Moreton Property Premium "Indication" for Utah Department of Natural Resources
G. Deloitte Liability Premium Allocation "White Paper"
H. Risk Watch Newsletter Sample

A. List of Interviewees

State of Utah, Department of Administrative Services, Division of Risk Management

Kamron Dalton	Risk Support Services Manager
Tani Pack Downing	Director
Stephen Hewlett	Assistant Director
David Lund	Assistant Utah Attorney General, Litigation Division
Brian Nelson	Assistant Director

State of Utah, Department of Administrative Services, Division of Finance

Lynda McLane, CPA	Accountant, Financial Reporting
John Reidhead, CPA	Director

Deloitte Consultants, LLP (Actuary)

Rod Morris, FCAS, FSA, MAAA	Specialist Leader; Actuarial, Rewards & Analytics

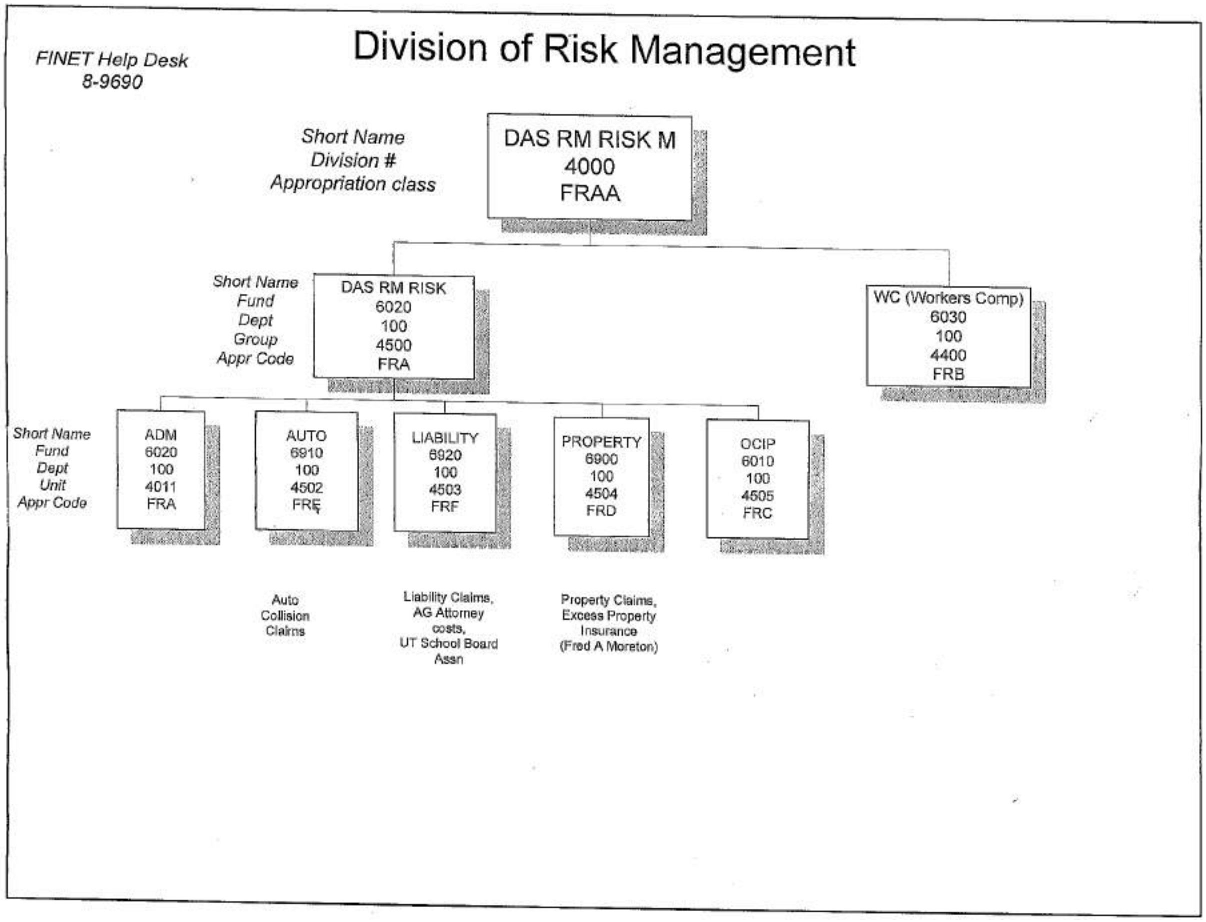
Moreton & Company (Property Insurance Broker)

Jon Stutz, CPCU	Senior Account Executive

Aon Risk Solutions (Liability Insurance Broker)

Keri Chappell	Senior Account Executive

B. Risk Management Financial Reporting Chart



C. House Bill 8 (FY17 Authorized Rates): Pages 49-53 (lines 1800-1945) Dealing with Risk Management

RISK MANAGEMENT
1800 ISF - Risk Management Administration
1801 Liability Premiums
1802 Administrative Services 412,836.00
1803 Agriculture 42,537.00
1804 Alcoholic Beverage Control 89,311.00
1805 Attorney General's Office 165,404.00
1806 Auditor 12,572.00
1807 Board of Pardons 12,674.00
1808 Capitol Preservation Board 11,334.00
1809 Career Service Review Office 623.00
-49-
H.B. 8 Enrolled Copy
1810 Commerce 89,920.00
1811 Commission on Criminal and Juvenile Justice 5,956.00
1812 Heritage and Arts 36,057.00
1813 Corrections 751,058.00
1814 Courts 335,043.00
1815 Utah Office for Victims of Crime 4,182.00
1816 Education 230,470.00
1817 Deaf and Blind School 72,779.00
1818 Environmental Quality 118,423.00
1819 Fair Park 17,278.00
1820 Financial Institutions 15,147.00
1821 Governor 29,760.00
1822 Governor's Office of Management and Budget 26,295.00
1823 Governor's Office of Economic Development 86,599.00
1824 Health 377,919.00
1825 Heber Valley Railroad 3,134.00
1826 House of Representatives 10,601.00
1827 Human Resource Management 36,325.00
1828 Human Services 758,922.00
1829 Labor Commission 30,862.00
1830 Insurance 151,738.00
1831 Legislative Fiscal Analyst 9,228.00
1832 Legislative Auditor 8,417.00
1833 Legislative Printing 1,319.00
1834 Legislative Research & General Counsel 20,167.00
1835 Medical Education Council
1836 National Guard 106,895.00
1837 Natural Resources 347,773.00
1838 Public Lands 14,502.00
1839 Public Safety 480,862.00
1840 Public Service Commission 11,077.00

School and Institutional Trust Lands 23,155.00
Senate 6,214.00
Tax Commission 163,680.00
Technology Services 225,603.00
Treasurer 6,765.00
Utah Communications Network 9,222.00
-50-

Enrolled Copy H.B. 8

Utah Science and Technology and Research 7,840.00
Veteran's Affairs 5,012.00
Workforce Services 396,884.00
Transportation 2,471,000.00
Board of Regents 68,396.00
Dixie State University 139,526.00
Salt Lake Community College 234,328.00
Snow College 82,125.00
Southern Utah University 150,101.00
Bridgerland Applied Technology College 28,479.00
Davis Applied Technology College 31,069.00
Ogden Weber Applied Technology College 32,216.00
Uintah Basin Applied Technology College 23,268.00
Tooele Applied Technology College 6,819.00
Dixie Applied Technology College 9,846.00
Mountainland Applied Technology College 16,534.00
Southwest Applied Technology College 9,570.00
University of Utah 1,370,353.00
Utah State University 542,179.00
Utah Valley University 407,741.00
Weber State University 312,685.00
School Districts 4,685,886.00
Property Insurance Rates
Net Estimated Premium 17,093,905.00
Gross Premium for Buildings
Existing Insured Buildings
Existing Insured Buildings See formula
Building value as determined by Risk Mgt. & owner as of June 2015 multiplied by the Marshall & Swift Valuation Service rates as of March 2015 associated w/ Building Construction Class, Occupancy Type, Building Quality, & Fire Protection Code
Newly Insured Buildings
Newly Insured Buildings See formula
Building value as determined by Risk Mgt. & owner as of insured date multiplied by the Marshall & Swift Valuation Service rates as of March 2015 associated w/ Building Construction Class, Occupancy Type, Building Quality, & Fire Protection Code
-51-

H.B. 8 Enrolled Copy

Building Demographic Discounts
Fire Suppression Sprinklers 15% discount
Smoke alarm/Fire detectors 5% discount
Flexible water/Gas connectors 1% discount
Surcharges
Lack of compliance with Risk Mgt. recommendations 10% surcharge
Building built prior to 1950 10% surcharge
Agency Discount1 63.5% discount
Agency Discount2 See formula
Agency specific discount negotiated w/ Risk Mgt
Gross Premium for Contents
Existing Insured Buildings
Existing Insured Buildings See formula
Content value as determined by owner as of June 2015 multiplied by the Marshall & Swift Valuation Service rates as of March 2015 associated w/ Building Construction Class, Occupancy Type, Building Quality, & Fire Protection Code
Newly Insured Buildings
Newly Insured Buildings See formula
Content value as determined by owner as of insured date multiplied by the Marshall & Swift Valuation Service rates as of March 2015 associated w/ Building Construction Class, Occupancy Type, Building Quality, & Fire Protection Code
Gross Premium Discounts/Penalties
Non-Compliance Penalty - Meeting Minutes 5% Penalty
Up to 5% penalty for non-compliance with Risk loss control activities, namely submitting Risk Control meeting minutes on a quarterly basis.
Non-Compliance Penalty - Self Inspection Survey 10% Penalty
Up to 10% penalty for non-compliance with Risk loss control activities, namely submitting the annual Self Inspection Survey.
Specialized Lines of Coverage See Formula
Specialized lines of insurance outside of typical coverage lines. Pass through costs direct from insurance provider.
Automobile/Physical Damage Premiums
Public Safety rate for value less than $35,000 (per vehicle) 175.00
Higher Education rate for value less than $35,000 (per vehicle) 125.00
Other state agency rate for value less than $35,000 (per vehicle) 150.00
-52-

Enrolled Copy H.B. 8

School bus rate (per vehicle) 200.00
School district rate for value less than $35,000 (per vehicle) 50.00
Rate for value more than $35,000 (per $100 of value) 0.80
Other vehicles or related equipment
State and Higher Education (per vehicle) 75.00
School District (per vehicle) 50.00

Standard deductible (per incident) 1,500.00
Up to this amount with discounts available for compliance with specifically identified Risk Management loss control activities.
Workers Compensation Rates
UDOT 1.25% per $100 wages
State Agencies 0.70% (except UDOT)
Aviation (per PILOT-YEAR) $2,200
Course of Construction Premiums
Rate per $100 of value 0.053
Charged for half of a year
Charter Schools
Liability ($2 million coverage)
Charter School Pre-opening Liability Coverage (per School) 1,000.00
$1,000 minimum (per student) 8.00
Property ($1,000 deductible per occurrence)
Cost per $100 in value, $100 minimum 0.10
Comprehensive/Collision ($500 deductible per occurrence)
Cost per year per vehicle 150.00
Employee Dishonesty Bond (per year) 250.00

D. Risk Rate Impact

Sum of Impact	Rate Type		
Entity	**Liability**	**Property**	**Grand Total**
ADMINISTRATIVE SERVICES		$0.00	$0.00
ADMINISTRATIVE SERVICES - ADMINISTRATIVE RULES		$1.18	$1.18
ADMINISTRATIVE SERVICES - ARCHIVES		-$659.93	-$659.93
ADMINISTRATIVE SERVICES - DEBT COLLECTION		$1.91	$1.91
ADMINISTRATIVE SERVICES - EXECUTIVE DIRECTOR	$28,895.00	$1.35	$28,896.35
ADMINISTRATIVE SERVICES - FACILITIES		$41,853.02	$41,853.02
ADMINISTRATIVE SERVICES - FINANCE		-$396.33	-$396.33
ADMINISTRATIVE SERVICES - FLEET		$15,214.56	$15,214.56
ADMINISTRATIVE SERVICES - GENERAL SERVICES		$0.00	$0.00
ADMINISTRATIVE SERVICES - PURCHASING		-$15,795.07	-$15,795.07
ADMINISTRATIVE SERVICES - RISK MANAGEMENT		-$2,805.59	-$2,805.59
AGRICULTURE	$1,747.00	$155.17	$1,902.17
ALCOHOLIC BEVERAGE CONTROL	$4,349.00	-$35,933.02	-$31,584.02
ALPINE SCHOOL DISTRICT		-$2,080.93	-$2,080.93
ATTORNEY GENERALS OFFICE	$59,643.00	$74.74	$59,717.74
AUDITORS OFFICE	$710.00	$4.94	$714.94
BEAVER SCHOOL DISTRICT		$604.89	$604.89
BOX ELDER SCHOOL DISTRICT		$30,010.12	$30,010.12
CACHE SCHOOL DISTRICT		$6,693.39	$6,693.39
CANYONS SCHOOL DISTRICT		$53,620.99	$53,620.99
CAPITOL PRESERVATION BOARD	$569.00	-$2,093.62	-$1,524.62
CARBON SCHOOL DISTRICT		$15,599.19	$15,599.19
CAREER SERVICE REVIEW BOARD		$0.48	$0.48
Career Service Review Board	$34.00		$34.00
CHARTER SCHOOLS	-$40,010.00	-$42,332.32	-$82,342.32
COMMERCE DEPARTMENT	$10,962.00	$19.54	$10,981.54
CORRECTIONS - CUCF		$11,522.53	$11,522.53
CORRECTIONS - UTAH STATE PRISON	-$102,053.00	$13,195.35	-$88,857.65
CORRECTIONS AP & P		$533.26	$533.26
COURTS	$60,766.00	$1,631.67	$62,397.67
DAGGETT SCHOOL DISTRICT		$4,074.17	$4,074.17
DAVIS COUNTY SCHOOL DISTRICT		$61,827.83	$61,827.83
DIXIE STATE UNIVERSITY	$25,944.00	-$14,194.34	$11,749.66
DUCHESNE SCHOOL DISTRICT		$7,200.25	$7,200.25
EDUCATION	-$51,769.00	-$5,909.63	-$57,678.63
EMERY SCHOOL DISTRICT		$9,999.91	$9,999.91
Environmental Quality	$19,499.00		$19,499.00
ENVIRONMENTAL QUALITY DEPARTMENT		-$13,494.27	-$13,494.27
FINANCIAL INSTITUTIONS	-$597.00	$3.01	-$593.99
GARFIELD SCHOOL DISTRICT		$1,211.35	$1,211.35

Governor	$16,588.00		$16,588.00
GOVERNORS OFFICE		$742.38	$742.38
GOVERNORS OFFICE - CRIMINAL AND JUVENILE JUSTICE		$5.86	$5.86
GOVERNORS OFFICE - ECONOMIC DEVELOPMENT		-$277.40	-$277.40
GOVERNORS OFFICE - OFFICE OF MANAGEMENT & BUDGET		$26.95	$26.95
GOVERNORS OFFICE - UTAH OFFICE FOR VICTIMS OF CRIME		$190.05	$190.05
GRAND SCHOOL DISTRICT		$1,536.78	$1,536.78
GRANITE SCHOOL DISTRICT		$58,210.88	$58,210.88
HEALTH DEPARTMENT	$64,587.00	-$964.94	$63,622.06
HEBER VALLEY RAILROAD	-$782.00	$366.18	-$415.82
HERITAGE AND ARTS DEPARTMENT	$3,485.00	$9.71	$3,494.71
HERITAGE AND ARTS DEPARTMENT - ARTS & MUSEUMS DIVISION		$3,928.47	$3,928.47
HERITAGE AND ARTS DEPARTMENT - LIBRARY		$5,348.97	$5,348.97
HERITAGE AND ARTS DEPARTMENT - STATE HISTORY		$51,266.90	$51,266.90
HOUSE OF REPRESENTATIVES	$1,109.00	$10.53	$1,119.53
HUMAN RESOURCE MANAGEMENT	$6,275.00	$10.27	$6,285.27
HUMAN SERVICES - JUVENILE JUSTICE SERVICES		-$291.32	-$291.32
HUMAN SERVICES - STATE HOSPITAL		$9,501.71	$9,501.71
HUMAN SERVICES DEPARTMENT	$37,129.00	-$1,541.01	$35,587.99
HUMAN SERVICES DEPARTMENT-DEVELOPMENTAL CENTER		$1,903.13	$1,903.13
INSURANCE DEPARTMENT	$4,254.00	$13.59	$4,267.59
IRON SCHOOL DISTRICT		$6,559.69	$6,559.69
JORDAN SCHOOL DISTRICT		$17,284.89	$17,284.89
JUAB SCHOOL DISTRICT		$3,211.66	$3,211.66
JUDICIAL CONDUCT COMMISSION		$0.27	$0.27
KANE SCHOOL DISTRICT		-$167.32	-$167.32
LABOR COMMISSION	-$1,520.00	$42.35	-$1,477.65
LEGISLATIVE AUDITORS OFFICE	$1,042.00	-$9.94	$1,032.06
LEGISLATIVE FISCAL ANALYSTS OFFICE	$94.00	$1.37	$95.37
LEGISLATIVE PRINTING	-$251.00	-$93.04	-$344.04
LEGISLATIVE RESEARCH & GENERAL COUNSEL	$2,581.00	$6.08	$2,587.08
LOGAN CITY SCHOOL DISTRICT		$14,518.57	$14,518.57
MEDICAL EDUCATION COUNCIL		$0.56	$0.56
MILLARD SCHOOL DISTRICT		$1,443.77	$1,443.77
MORGAN SCHOOL DISTRICT		$2,330.85	$2,330.85
MURRAY SCHOOL DISTRICT		$4,245.53	$4,245.53
NATIONAL GUARD	$18,672.00	$169,591.21	$188,263.21
NATIONAL GUARD - CAMP WILLIAMS		$0.00	$0.00
NATURAL RESOURCES - FORESTRY, FIRE & STATE LANDS		$8,952.19	$8,952.19
NATURAL RESOURCES - OIL, GAS & MINING		-$4.66	-$4.66
NATURAL RESOURCES - PARKS & RECREATION		$242,728.32	$242,728.32
NATURAL RESOURCES - UTAH GEOLOGICAL SURVEY		$108.89	$108.89
NATURAL RESOURCES - WATER RESOURCES DIVISION		$71,010.52	$71,010.52

NATURAL RESOURCES - WATER RIGHTS DIVISION		-$545.28	-$545.28
NATURAL RESOURCES - WILDLIFE RESOURCES		-$131.90	-$131.90
NATURAL RESOURCES DEPARTMENT	-$82,386.00	-$28,827.10	-$111,213.10
NAVAJO TRUST FUND		$493.49	$493.49
NEBO SCHOOL DISTRICT		$26,840.42	$26,840.42
NORTH SANPETE SCHOOL DISTRICT		$14,254.43	$14,254.43
NORTH SUMMIT SCHOOL DISTRICT		$2,853.44	$2,853.44
NORTHEASTERN UTAH EDUCATIONAL SERVICES (NUES)		$184.12	$184.12
OGDEN CITY SCHOOL DISTRICT		-$5,734.46	-$5,734.46
PARDONS, BOARD OF		-$993.51	-$993.51
PARK CITY SCHOOL DISTRICT		$1,085.54	$1,085.54
PIUTE SCHOOL DISTRICT		$691.08	$691.08
PROVO SCHOOL DISTRICT		$17,362.77	$17,362.77
PUBLIC LANDS POLICY OFFICE	$3,574.00	$4.23	$3,578.23
PUBLIC SAFETY - FIRE MARSHAL		$13.12	$13.12
PUBLIC SAFETY DEPARTMENT	$76,735.00	-$13,436.05	$63,298.95
PUBLIC SAFETY/DRIVER LICENSE DIV		-$317.91	-$317.91
PUBLIC SAFETY/EMERGENCY SERVICES		-$17.90	-$17.90
PUBLIC SERVICE COMMISSION	$541.00	$21.24	$562.24
RICH SCHOOL DISTRICT		$911.06	$911.06
SALT LAKE COMMUNITY COLLEGE	$16,276.00	-$20,203.87	-$3,927.87
SALT LAKE SCHOOL DISTRICT		$3,877.41	$3,877.41
SAN JUAN SCHOOL DISTRICT		$14,514.25	$14,514.25
SCHOOL DISTRICTS	-$81,229.00		-$81,229.00
SCHOOLS FOR THE DEAF AND BLIND		$1,403.41	$1,403.41
SENATE	$393.00	$5.02	$398.02
SEVIER SCHOOL DISTRICT		$21,832.53	$21,832.53
SNOW COLLEGE	-$10,696.00	$14,001.93	$3,305.93
SOUTH SANPETE SCHOOL DISTRICT		$1,618.92	$1,618.92
SOUTH SUMMIT SCHOOL DISTRICT		$2,875.42	$2,875.42
SOUTHEASTERN EDUCATIONAL CENTER		$38.62	$38.62
SOUTHERN UTAH UNIVERSITY	$19,721.00	$16,542.73	$36,263.73
TAX COMMISSION	$899.00	-$8,045.24	-$7,146.24
TECHNOLOGY SERVICES - DTS	$22,425.00	-$2,136.31	$20,288.69
TEST ACCOUNT - HIGHER EDUCATION		$0.00	$0.00
TINTIC SCHOOL DISTRICT		$2,303.90	$2,303.90
TOOELE SCHOOL DISTRICT		-$27,454.93	-$27,454.93
Transportation (UDOT)	$108,000.00	$42,800.79	$150,800.79
TRANSPORTATION (UDOT) - AERONAUTICAL OPERATIONS		-$2,911.10	-$2,911.10
TRANSPORTATION (UDOT) - UNLICENSED EQUIPMENT		$35,092.48	$35,092.48
TREASURERS OFFICE	$334.00	$14.21	$348.21
TRUST LANDS	-$887.00	$1,390.64	$503.64
UCAN (Utah Communication Network)	$14.00		$14.00
UCAT-Bridgerland ATC	$3,078.00	-$8,187.80	-$5,109.80

UCAT-Davis ATC	$1,858.00	-$10,741.73	-$8,883.73
UCAT-Dixie	-$388.00	$3,427.19	$3,039.19
UCAT-Ogden/Weber	$2,605.00	$13,262.82	$15,867.82
UCAT-Southwest	$965.00	$2,255.61	$3,220.61
UINTAH SCHOOL DISTRICT		$3,461.40	$3,461.40
UNIVERSITY OF UTAH	$58,187.00	-$34,572.10	$23,614.90
USU EASTERN		$4,440.20	$4,440.20
UTAH COMMUNICATIONS AUTHORITY		$8,575.36	$8,575.36
Utah Science, Technology and Research Initiative (USTAR)	$483.00		$483.00
Utah State Board of Regents / Statewide	$4,392.00	$213.61	$4,605.61
UTAH STATE FAIRPARK	-$537.00	-$5,060.99	-$5,597.99
UTAH STATE UNIVERSITY	$88,231.00	-$56,903.77	$31,327.23
UTAH VALLEY UNIVERSITY	-$21,906.00	$96,479.91	$74,573.91
VETERANS AFFAIRS	$542.00	-$138.61	$403.39
WASATCH SCHOOL DISTRICT		$188.02	$188.02
WASHINGTON SCHOOL DISTRICT		$30,037.86	$30,037.86
WAYNE SCHOOL DISTRICT		$2,085.66	$2,085.66
WEBER SCHOOL DISTRICT		$19,554.27	$19,554.27
WEBER STATE UNIVERSITY	$40,143.00	$31,776.21	$71,919.21
WORKFORCE SERVICES DEPARTMENT	$43,011.00	-$6,025.55	$36,985.45
UCAT-Mountainland ATC	$1,038.00	$2,728.47	$3,766.47
UCAT-Tooele ATC	$442.00	-$8,757.57	-$8,315.57
UCAT-Uintah Basin ATC	$714.00	$17,987.36	$18,701.36
UCAT-Utah College of Applied Technology Administration		$1,508.70	$1,508.70
Grand Total	**$468,524.00**	**$1,030,985.37**	**$1,499,509.37**

E. Example Communication: Property Premium

Property Insurance Invoice 2017

Effective July 1, 2016 through June 30, 2017

May 05, 2016

JEREMY SNELL
TINTIC SCHOOL DISTRICT
55 E MAIN P O BOX 210
EUREKA UT 84628

Premium Due March 1, 2017

Total Premium Amount:	$31,849.85	Total Insured Value:	$21,872,634.02
Account Credits:	$0.00		
Net Premium:	**$31,849.82**		

Your organization was given credits of 0% out of a possible 15%. If you have any questions regarding the credits please contact your Risk Management Loss Control Specialist.

Your check should be made payable to State of Utah Risk Management and sent to:

State of Utah Risk Management
5120 State Office Building
Salt Lake City, UT 84114

If we do not receive your payment by March 1, 2017, your account may begin to accrue interest on the balance. If you have any questions about the premium please call our office at (801)538-9560.

Thank you,

Kamron Dalton
Division of Risk Management

Insured Assets

Bldg #	Asset Name	Type	Id	Value	Premium	Credits	Net Premium
3124	District Office	Building	A-00085452	$2,113,467.00	$963.34	$0.00	$963.34
3124	District Office	Contents	A-00092498	$157,451.90	$86.54	$0.00	$86.55
3125	West Desert High School	Building	A-00084984	$1,364,000.00	$3,933.81	$0.00	$3,933.81
3125	West Desert High School	Contents	A-00093391	$448,132.95	$2,048.49	$0.00	$2,048.48
3138	Tintic High Ind Arts Storage	Building	A-00085451	$788,018.00	$3,760.90	$0.00	$3,760.90
3138	Tintic High Ind Arts Stg	Contents	A-00093442	$472,414.44	$3,214.14	$0.00	$3,214.13
5052	Tintic High School (New) ✓Sprinklers ✓Alarms	Building	A-00085454	$8,556,408.00	$3,866.80	$0.00	$3,866.80
5052	Tintic High School (New)	Contents	A-00093863	$720,646.95	$397.66	$0.00	$397.67
5053	Callao School ✓Alarms	Building	A-00085350	$188,082.00	$616.74	$0.00	$616.74
5053	Callao School	Contents	A-00091897	$89,323.74	$464.25	$0.00	$464.25
5054	Bus Garage (New)	Building	A-00085449	$167,400.00	$1,366.98	$0.00	$1,366.98
5055	Bus Garage (Old)	Building	A-00085450	$301,700.00	$934.99	$0.00	$934.99
5055	Bus Garage (Old)	Contents	A-00090819	$31,488.77	$174.30	$0.00	$174.29
5056	Boiler Room	Building	A-00085447	$175,112.00	$175.06	$0.00	$175.06
8131	Eureka Elementary ✓Sprinklers ✓Alarms	Building	A-00085453	$3,969,000.00	$2,473.37	$0.00	$2,473.36
8131	Eureka Elementary (new)	Contents	A-00093677	$608,612.03	$599.30	$0.00	$599.30
8132	West Desert Elementary (old) ✓Alarms	Building	A-00084980	$108,160.00	$269.21	$0.00	$269.21
8132	West Desert Elementary (old)	Contents	A-00091191	$45,886.89	$181.02	$0.00	$181.02
8182	West Desert Modulars (2) ✓Alarms	Building	A-00084983	$466,560.00	$1,161.25	$0.00	$1,161.24
8182	West Desert Modulars (2)	Contents	A-00092192	$112,234.50	$442.76	$0.00	$442.76
8853	Tintic High Modular Classroom	Building	A-00085448	$178,560.00	$246.15	$0.00	$246.15
8853	Tintic High Modular Classroom	Contents	A-00089763	$13,586.85	$29.60	$0.00	$29.60
8854	Tintic School Dist Housing	Building	A-00085446	$400,000.00	$330.43	$0.00	$330.43
9222	West Desert Bus Shop	Building	A-00084982	$223,200.00	$3,821.07	$0.00	$3,821.07
9402	Teacher Housing (1 sgle &1 dble) ✓Flex	Building	A-00084981	$173,188.00	$291.69	$0.00	$291.69

F. Moreton Property Premium "Indication" for Utah Department of Natural Resources

MORETON
& COMPANY
TRUSTED SINCE 1910

May 25, 2016

Tani Pack Downing
Director
State of Utah, Division of Risk Management
5120 State Office Building
Salt Lake City, Utah 84114

Tani,

You had asked that Moreton & Company approach the insurance marketplace to bid the cost of property coverage for the Utah Department of Natural Resources list of 850 properties. We discussed the fact that it would not be possible to procure firm, bindable bids in the time limit provided, but that we, Moreton, would use our best judgment based on the criteria provided and our firm's experience to provide a ballpark indication of the property premium for the group.

The Department of Natural Resources list of properties includes many low value properties with the following characteristics:

- Approximately 20% are located in very rural areas with an increased susceptibility to fire
- 816 of the 850 are not sprinklered
- 44 of the 850 are listed with a Quality rating of "Poor"
- 57 of the 850 show no asset value at all (all are restrooms)

Methodology: We started with a competitive base rate of $0.12 and added rate to each property based on location, sprinklers, and construction quality. We then applied a group discount of 10% and ended up with an overall group rate of $0.25. When we multiply the total building values of $210,763,676 by $0.25 (then divide by 100), we estimate the total premium for the group to be in the range of $526,909 with a low deductible. If we take a higher deductible (i.e. above $1,000 - $5,000) the premium can come down.

Again, this is a ballpark estimate only and not a bindable figure with any particular insurance company. Please don't hesitate to let me know if you have any questions or concerns regarding.

Regards,

Jonathan Stutz
Senior Account Executive

An Assurex Global Partner
P.O. Box 58139, Salt Lake City, Utah 84158-0139
101 South 200 East, Suite 300, Salt Lake City, Utah 84111 • Phone: 801-531-1234 • Fax: 801-531-6117 • www.moreton.com

G. Deloitte Liability Premium Allocation "White Paper"

Deloitte.

Deloitte Consulting LLP
350 South Grand Avenue
Los Angeles, CA
USA

Tel: +1 213 688 0800
Fax: +1 213 688 0100
www.deloitte.com

May 9, 2013

Ms. Tani Downing
Director of Risk Management
State of Utah
Division of Risk Management
5120 State Office Building
Salt Lake City, Utah 84114

RE: State Entity Liability Premium Allocation Approach

Dear Ms. Downing:

Below is a brief description of the allocation methodology used by Deloitte Consulting LLP ("Deloitte Consulting") to estimate the liability premiums for entities within the State of Utah ("the State" or "State") each fiscal year.

Annually, Deloitte Consulting performs a complete actuarial analysis using 25+ years of historical data to determine a projection of liability claim costs (also referred to as premiums) to be incurred in the upcoming fiscal year. In this analysis, we perform the projection separately for four departmental groups: Higher Education, School Districts, Department of Transportation, and all Other State Agencies combined. Our most recent analysis is fully documented in a report entitled, *"Self-Insurance Liability Program Reserves and Projections as of June 30, 2012"* and is dated August 13, 2012. We note that any caveats and limitations listed in our August 13, 2012 report also apply to this letter.

For two of the four departmental groups, we allocate the departmental group premium projections down to a more granular State entity level. This letter provides a brief overview of this allocation process. We note that we do not perform a more granular allocation estimate for the Department of Transportation and School Districts. For Higher Education, we allocate the premiums down to the educational institution and for the combined Other State Agencies departmental group we allocate premiums down to the individual agency.

The primary goal of an allocation system is to distribute total program or departmental premiums to the appropriate entities in an equitable manner. A model should:

- Use readily available data (exposures and historical claim costs)
- Use exposures that correlate well with the expected claim costs
  - For "Higher Education" and "Other State Agencies" we use annual expenditures as the exposure base
- Be easy to understand and calculate
- Balance conflicting goals of stability and responsiveness

Essentially there are two basic approaches to allocating premium. The "exposure method" (stable) allocates premium to entity as a percentage of an entity's exposure to the overall departmental group's exposure. The exposure method is generally favored when an entity's exposure volume is small and losses infrequent and less predictable. The "experience method" (responsive) allocates premium to entity as a percentage of an entity's historical claim cost experience to the overall departmental group's claim cost experience. The experience

Member of
Deloitte Touche Tohmatsu

Ms. Tani Downing
May 9, 2013
Page 2 of 2

method is generally favored when exposure volume is substantial and loss frequency is significant and more predictable.

Most allocation systems use a compromise approach with some weighting between the exposure method and experience method. The "weight" or "credibility" applied to the experience method grows as exposure volume and predictability of claim costs of an entity grows.

The following outlines the steps used by Deloitte Consulting as of June 30, 2012 to allocate the premiums to entity for fiscal year 2013 (7/1/2013 – 6/30/2014):

Step 1: Estimate the premium based on the exposure method. This method allocates the departmental group premium to entity based on a projection of the exposure base for fiscal year 2013. For example, if an entity's appropriated funding of expenditures for fiscal year 2013 is 10% of the overall departmental group's appropriated funding of expenditures, then 10% of the departmental group's premium would be allocated to this entity for fiscal year 2013.

Step 2: Estimate the premium based on the experience method. This method allocates the premium based on each entity's own historical experience. In performing this method, we rely on five years of reported claim costs. For example, reported claim costs for fiscal year 2007 through 2011 were used to allocate the premiums for fiscal year 2013. In calculating the reported claim costs, we cap each claim at $250,000 to limit the impact of any one large incident in the allocation.

Step 3: Calculate the credibility weighted average premium of the results of Step (1) and Step (2). The weight applied to the experience method is based on the volume of each entity's exposure base. For example, the larger the entity (i.e. the greater the historical expenditures), the larger the weight that is applied to the experience method described in Step (2).

Step 4: Limit the year over year change in premium to +/- 20%. In order to increase stability in premiums from year to year, the State's Division of Risk Management has asked Deloitte Consulting to limit the year-over-year change in premium to +/-20%. To the extent the overall premium for the departmental group does not equal the summation of each entity's premium after this capping, the difference is allocated to the entities whose premiums have not been capped on a pro-rata basis.

Although the process discussed above does not provide all details of the calculations used to perform the allocations, we believe it provides you with sufficient information to understand the factors that play a role in a given entity's premium projection. If you have further questions or would like more details, please do not hesitate to contact us.

Sincerely,

Rod Morris

Rod Morris, FCAS, MAAA
Specialist Leader
Deloitte Consulting LLP
(213) 688-3374

Adam Hirsch, FCAS, MAAA
Manager
Deloitte Consulting LLP
(213) 299-4655

H. Sample Risk Watch Newsletter

Risk Management
a division of the Department of Administrative Services

Risk Watch

... to insure and protect State assets, promote safety, and prevent losses through proactive, collaborative loss control and claims management ... - DRM Mission Statement

State Risk Manager's Message	1
Risk Year in Review	2
SIS Review	3
Unknown? I Don't Know…	4
The Journey of a Claim	5
Game Change: Barneck v. Utah Department of Transportation	6
A Certificate of Insurance: What it is And What it Ain't	7
Before a Violent Critical Incident or Active Shooter Event	7
FMLA Reminder for HR Administrators!	9
Avoiding Frozen Pipe Losses	9

Don't miss the PUBLIC SECTOR LAW & RISK SYMPOSIUM on Tuesday, January 5th, at the Karen Gail Miller Conference Center in Sandy, Utah. Click here to see the agenda. Click here to register.

State Risk Manager's Message


Tani Downing
Division Director

We've made a few changes here at Risk. Last January, Kamron Dalton joined us from Department of Technology Services as our Administrative Support Manager. He jumped into the world of premium billing without hesitation and is a wonderful addition to our team.

We also added two new team members, Camille Richins as an Office Specialist and Wes Escalante as an eLearning Developer and Analyst. This brings our staff total to 30. This relatively small staff takes on the challenge of managing over 2000 claims a year and endeavoring to reduce claims. This is a considerable task considering we insure over 6,000 buildings worth more than \$26 billion, over 13,000 vehicles valued at \$183 million, and over 120,000 employees (who are priceless, of course). See James Brown's article on how these people and assets fared last fiscal year.

One task that we undertake every year is a review of our insurance policy. We gather feedback from our insureds and take that into account when making any changes. Several significant issues have been brought to our attention and rather than make the changes this year, we plan on studying them this fiscal year, gathering more input and making a change next year. Specifically, we are looking at modifying language in our policy relating to student interns, coverage for commercial activities, requirements for construction equipment lease/rental, and some others. Again, these did not change this year, but we will continue to solicit feedback from you over the coming year.

Some things did change this year. Our premium for charter school liability was reduced to \$10 per student due to a favorable claims history. Due to an unfavorable claims history, our auto deductible has increased to \$750. We will also start enforcing our deductibles more strictly. If two of your vehicles hit each other, a deductible will be assessed for both vehicles instead of just one as we had done in the past.

We hope you find the following information useful and informative. We enjoy the opportunity to work with you in reducing risk and protecting our collective assets. We appreciate the work you do!