PART 4 - Costing During Negotiations

Costing Collective Bargaining Proposals: A manual for Canadian academic staff associations

CAUT
Canadian Association of University Teachers

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Part 4: Costing During Negotiations

Quick Reference – Part 4 Summary

Part 4 reviews how to use the Base Year Model as a benchmark for costing specific proposals during negotiations. There are two important methods for reporting costs:

1. **Cash flow** reports the 'new money' needed to pay for the changes in a year or over the term of the collective agreement. Cash flow is reported as a total dollar amount.
2. **End rate** reports the ongoing, structural changes to compensation. End rate is reported as a percentage increase to total compensation.

When costing multi-year proposals, it is important to account for the **compounding** effects of ongoing changes to compensation.

There are several special modules in part 4 which review the following topics:

1. Costing changes to employee rights.
2. Costing faculty complement.
3. Costing changes to paid and unpaid leaves.

In some cases, changes will not increase individual compensation, but the **changes impact the underlying assumption**s about the composition of the bargaining unit. If it takes more academic staff to deliver courses, such changes may have a significant impact on the overall salary mass of the bargaining unit.

In other cases, strengthening employee rights does not result in any direct cost increase but may constrain management rights to unilaterally direct the operations of the university or college. In general, employers will vigorously resist the erosion of management rights, even if there are no direct or immediate costs associated with the change. There are **limitations to the role of costing** and in these cases, **bargaining power** will determine the outcome.

This section discusses how to use the Base Year Model and information collected about compensation during the negotiations process. The basic objective in costing collective bargaining proposals is to estimate the value of 'new money' related to each proposed change to the current terms and conditions in the collective agreement. The Base Year Model serves as the benchmark or reference point to determine the variance or relative cost of each proposed change. The primary objectives of this section include:

1. The importance of systematically costing collective bargaining proposals
2. How to use the template to cost proposals
3. Special considerations when costing proposals during negotiations, especially proposals related to:
   a. Costing changes to employee rights in the collective agreement.
   b. Costing changes to the complement of academic staff.
   c. Costing changes to paid and unpaid leaves.

Framework for Using Base Year Model to Cost Proposals

Using information about compensation to cost the impact of collective bargaining proposals on compensation begins with the summary of costs for the Base Year Model. The summary of basic information in the Base Year Model will be used as the benchmark for the key assumptions such as the composition of the bargaining unit and the number of FTEs, the total number of courses delivered by bargaining unit members, and the weighted average base salary.

Summary of basic information

Reference period		Snapshot date	
Full-time employees		Total annual base salary costs	
Part-time employees			
Headcount (HC)		Average annual salary per HC	
Full-time equivalents (FTE)		Average annual salary per FTE	
Total courses (credits) delivered			
Average courses (credits) per FTE		Average salary per course	

The summary of base year costs are used as the base year values in the last two Excel-based templates titled, "Impact of collective agreement" and "Summary of changes." The mechanics of calculating the cost impacts of collective bargaining proposals follows a systematic process for each change in compensation:

1. Calculate the cost impact of a general wage increase to the base wage
2. Calculate the roll-up of wage-related benefits
3. Calculate new and ongoing cost increases associated with changes to benefits
4. Calculate any new cost increases associated with one-time changes to benefits
5. Calculate the cost impact of ongoing benefit reductions
6. Calculate the cost impact of one-time benefit reductions

These calculations are organized on the worksheet template titled, "Impact of collective agreement."

General wage increase	Flat rate Percentage					
	Base Year	Year 1	Year 2	Year 3	Added to base	
Base salary					**Total**	**%**
Total base salaries						
Salary-related benefits						
Sub-total (salaries & salary-related benefits)						
% Increase to salaries and salary-related benefits						
Proposed benefit changes						
Ongoing benefit enhancements						
Individual proposal 1						
Individual proposal 2						
One-time benefit enhancements						
Individual proposal						
Ongoing benefit reductions						
Individual proposal						
One-time benefit reductions						
Individual proposal						
Sub-total (annual benefits changes)						
Cash flow (new money)					**Total added to base:**	
% Increase					**% Added to base:**	

Calculating & Reporting Costs from Multi-Year Proposals

There are two main ways to report costs associated with multi-year collective bargaining proposals:

- Cash flow (New money); and
- % increase (End rate).

The cash flow method of reporting costs reflects the estimated amount of money needed to pay the costs associated with the collective bargaining proposals. Cash flow is determined by the timing of the cost changes, but it does not distinguish between increases in the base rate and one-time or lump sum payments. For this reason, the cash flow method of reporting provides important financial information, but does not reflect structural changes in compensation.

The monetary value of cash flow associated with ongoing changes in the base compensation rate is reported separately to emphasize the compounding costs associated with ongoing changes in the base compensation rate.

The changes "added to the base" reflect the structural changes in compensation and the ongoing cost impacts of those changes. The cumulative change to the base indicates the percent change to the salary-related base rate over the term of the collective agreement. This "end rate" method illustrates the ongoing, out-year cost impact. The two reporting methods provide slightly different, but important information.

Calculating the Costs of Multi-Year Proposals

In multi-year collective agreements, increases to the base pay ***compound*** over the life of the agreement. That is, an increase this year becomes the "new base pay" upon which next year's increase is calculated, and this process is repeated for each year of the collective agreement. The result is that, in each future year, the percentage increase is applied to a higher base amount.

Consider an example that illustrates the power of compounding pay increases. In this example, we consider a 3-year contract, where the proposed annual increases in each successive year are: 2%, 2% and 3%. In this case, the overall increase in wages calculated over the entire three-year agreement is slightly *more* than 7 per cent.

While the effect of compounding may appear small – just a few cents on the dollar – the impact of compounding at the aggregate level of the bargaining unit can be significant for an organization.

To further illustrate, using our example, suppose that we have 150 employees earning an average annual salary of $115,000, initially. The estimated annual wage bill cost when compounding is *not* accounted for over the term of the collective agreement is almost $11,000.00 less than the actual cost incurred when the compounding is included. Of course, in this example, we are only illustrating the effects of compounding on straight wages; but the compounding principle applies to all wage related costs that escalate over the term of the contract.

Example – Compounding wage increases
A university or college employs 150 academic staff with an average annual salary of $115,000. The bargaining proposal is for a three-year agreement with annual base increases of 2%, 2%, and 3%. The total percentage increase over the three-year agreement would be 7.16%, (not 7%).

	Base period	Year one	Year two	Year three	Total increase
Contract % increase		2%	2%	3%	**7.16%**
Annual average salary	$115,000	$117,300	$119,646	$123,235	**$8,235**
Total annual salary mass of 150 staff	$17,250,000	$17,595,000	$17,946,900	$18,485,307	**$1,235,307**
Cost if calculated at only 7%					**$1,207,500**
Annual difference accounting for compounding					**$27,807**

Costing Base Salary Increases

In the row titled "General salary increase," input the value of the annual across-the-board (ATB) salary increases. The template calculates the impact of the general salary increase to the average salary and to the costs of the base annual wages. Next, the template applies the roll-up to salary-related benefits. Sub-totals for the annual salary and salary-related benefit costs based on the proposed ATB are presented as well as the cumulative percent change to the salary-related base. Non salary-related benefits do not change as a result of any changes to the base wage rate. Therefore, base year and the on-going out-year costs of the non salary-related benefits will be constant and not reported in this section of the template. Changes to benefits are calculated in the next section of the template.

Costing Changes in Benefits

Calculations of the cost impacts of changes in benefits, both salary-related and non salary-related, focus on "new money." The base year values of salary-related and nonwage-related benefit costs are already reflected in the Base Year Model as part of the employer's ongoing benefit costs. The calculation of the changes in benefits therefore focus on the cost differences from the base year for each

Ongoing or one-time changes to benefits are calculated based on information for each component of compensation in the Base Year Model. Changes can represent either increases or reductions in the costs of benefits. The following steps reflect the general process for calculating the costs of benefit changes for individual proposals. Note that certain benefits will require intermediate calculations – steps unique to a particular benefit or bargaining proposal.

1. Use a separate row for each proposed change to individual components of compensation.
2. Determine whether the proposed change represents an ongoing or one-time change to compensation.
3. Determine whether the proposed change involves a wage-related or nonwage-related benefit.
4. Calculate the difference between base year costs and the proposal.
5. Identify the impacted years. (For example, a benefit improvement may not take effect until year 2 of a three-year proposal.)
6. If the benefit is wage-related, you will need to apply the roll-up over the impacted years based on the cost difference from the base year.
7. Sub-total individual proposals into the respective ongoing or one-time benefit change categories.

For example, a set of proposals, which include five (5) changes to benefits, would be organized in the following manner based on whether the changes were ongoing or one-time, enhancements or reductions.

Cost differences in changes from base year (New money)		Salary-related	Year 1	Year 2	Year 3
Change #1					
Change #2					
Change #3					
Ongoing benefit enhancements	1 + 2 + 3				
Lump sum bonus					
One-time benefit enhancements					
Change in sick days		Yes			
Ongoing benefit reductions					
One-time benefit reductions					

Module – Costing Employee Rights in the Collective Agreement

Academic unions strive to secure a range of employee rights in the collective agreement. While most of these rights may not have a direct monetary component attached to them as an element of compensation, such rights may have a significant impact on the Base Year Model and overall compensation cost structures at the university or college. The intersection of employee rights and operational functions shape the compensation cost structure at the institution.

When & How to Cost Employee Rights

Whenever a collective bargaining proposal will change the underlying assumptions of the Base Year Model, that proposal should be costed. In other words, if the composition of the bargaining unit or the average number of courses delivered per employee changes, the union should estimate the cost impacts. Often, the estimates regarding the nature and extent of change will have to be inferred from the bargaining objectives. For example, bargaining proposals to increase the opportunities of contract academic to convert to continuing appointments may shift the composition of the bargaining unit towards more continuing appointments. In such a case, the cost impact would equal the marginal increase in the average cost per course by moving a greater share of the courses delivered to continuing employees.

The process for estimating the cost impacts of proposals to strengthen employee rights should begin with a careful examination of how these rights will impact the composition of the bargaining unit and operations of the institution. Once the new assumptions are modelled, costing should focus on the marginal cost increase or 'new money' required to pay for the enhanced rights. The following steps outline the process for costing new employee rights:

1. Estimate the operational changes resulting from the proposed language on employee rights. Think through the various ways in which the increased rights might change operations, alter the composition of the bargaining unit, constrain management rights, or introduce new potential sources of compensation.
   a. Do these rights change the composition of the workforce? What is the best estimate for the new configuration for the distribution of work across employee classifications?
   b. Do the rights change access or eligibility for insured benefits or other components of compensation not previously available to that employee group?
   c. Do these rights introduce new termination or separation costs? Estimate how many employees would likely be eligible for these new payments. For example, to cost the introduction or extension of the notice period for course cancellation compensation, the costing model would have to model an assumption for the number of employees eligible for this benefit.
   d. Do these rights increase paid or unpaid leaves? (See module on changes to paid and unpaid leaves.)
   e. Many rights have no direct cost impact but may impose significant transaction costs for managing the new work rules. While the administration may certainly consider these costs in their operational budgets, costing for collective bargaining is focused on compensation and should not attempt to estimate these costs.
   f. Individual rights, such as grievances resolved during the course of negotiations, would generally not be costed unless the settlement is used as a precedent for interpreting broader application of rights under the collective agreement. However, whether these costs are included as part of the newly negotiated terms of the collective agreement, or the clarification of previous rounds of bargaining, will depend on the settlement terms.

2. Focus on estimating the marginal cost difference between the benchmark from the Base Year Model and the new costs based on changes in the model's assumptions.
    a. To calculate the marginal cost differences, focus on the average total compensation cost per course.

Administrative Resistance Despite Cost Neutral Employee Rights

Administrators will generally resist efforts to expand employee rights, even if the costing model demonstrates that the changes would be cost neutral. This limitation of costing reflects the importance and value administrators place on management rights and the exclusive authority to manage the operations of the enterprise. Invariably, employee rights create operational constraints that will add to the administration's transactions costs in managing and running the institution. However, even these costs are less important than the right to manage and control the operations. The role of costing has limitations and does not substitute for the importance of bargaining power when negotiating the expansion of employee rights.

Workload Standards

There are two models for bargaining workload standards. First, centrally bargained standards enshrine the key provisions of the workload standard in the collective agreement. Second, an alternate model ascribes the responsibility for setting the terms of workload standards to individual faculty units or departments. This alternate model may retain collegial mechanisms for the creation of workload standards, but often have some form of administrative input.

For the purposes of costing, the normal teaching load established by workload standards has the most direct and important implications for operational assumptions and costing estimates. Other features of full-responsibility faculty appointments, such as research productivity and service, do not have the direct and clear link to operational costs.

Changes in the normal teaching loads defined in workload standards have significant implications for the cost impact for collective bargaining proposals. We can see the impact by using the simple formula of one faculty member teaching one term length course reflects one unit of labour producing one unit of teaching output. Reducing the normal teaching load from 3 – 2 down to 2 – 2 results in a 25 percent increase in the relative cost of the unit of labour. In the first workload model, 20 faculty members could produce 100 courses. Under the reduced workload model, the university or college would need 25 faculty members to produce the same level of teaching output.

Module – Costing Faculty Complement

While language proposals regarding faculty complement are often included in the 'non-monetary' package of collective bargaining proposals, such changes have the potential for significant impacts on the cost structure of compensation. This is because changes to complement, typically union proposals to increase the number of academic staff to handle the existing workload, can significantly change the operational assumptions of the Base Year Model.

For example, caps on course enrolments will generally require the university or college to offer more courses and hire more academic staff even if the size of the student body remains constant. In operational terms, it will take more labour to deliver educational services to the same number of students.

The cost impacts of other strategies for protecting faculty complement may not include such clear and direct increases to the total labour costs. For example, benchmarking ratios, or collective agreement language requiring the administration to maintain student–faculty ratios with a certain band or at a set historical target would appear to be cost neutral. In some ways, such proposals seek to standardize and hold constant the existing operational assumptions.

Again, administrative resistance to such proposals reveals the limitations of costing and rational, cost-based collective bargaining procedures. Administrators, like managers in any sector, will vigorously defend their unilateral rights to manage operations. Managers in any workplace setting constantly strive to increase efficiency and productivity in operations by controlling the work process.[32] Collective agreement language regarding faculty complement, even seemingly cost-neutral language on the maintenance of student-faculty ratios, fundamentally challenge these management rights.

32. For a discussion of employer strategies and behaviours, see chapter 6, Godard, John. "Understanding and Explaining Management", *Industrial Relations, the Economy, and Society*, Captus Press, 2011.

This also highlights another limitation of costing and modelling new assumptions based on past operational strategies. Employers, and that includes university and college administrators, will often actively change operational strategies to mitigate or escape the costs associated with these constraints. While costing the projected impacts of changes in complement or workload is necessarily limited to increasing current labour inputs, the final result will likely involve more substantial changes to work organization to reduce current cost structures.

Costing Language on Faculty Complement

The procedure for estimating the costs associated with a proposal regarding faculty complement begins with examining the existing assumptions in the Base Year Model and assessing how faculty complement language might alter these assumptions. Next, a series of probing questions can explore how language on complement might impact labour cost structures at the institution.

1. How does the proposal on faculty complement impact the number of academic staff needed to carry out the current operations of the university or college?
   a. To calculate the total annual costs associated with increasing the composition of the bargaining unit, multiply the number of additional positions by the average annual cost per FTE.
   b. The longer-term effects of this language are more difficult to cost as it constrains the administration's simplest strategy for increasing labour productivity – increasing enrollments while keeping the faculty complement constant or reducing the complement over time. Since this will likely be the greater concern from management's perspective, it is important for the union to explore potential reactions and unintended consequences of language on faculty complement.
2. Are there other teaching delivery mechanisms or technologies that the administration can implement to increase productivity without triggering the language on complement?
   a. Recent arbitration decisions, including some involving the university and college sector, have shown the difficulty in protecting the work of the bargaining unit for academic staff unions.[33]

Negotiating commitments to hire additional academic staff are notoriously slippery given management's residual rights to control the operations of the institution, including determining hiring practices, the number employees, what courses to offer and how the courses will be delivered. Such proposals may have important strategic and symbolic significance for the academic staff union, but since negotiated commitments to hire additional staff do not change the underlying assumptions, costing such proposals is not necessary.

Module – Costing Changes to Paid & Unpaid Leaves

Jurisdictions across Canada have enacted a number of new extended leave provisions in the past several years. For example, most jurisdictions now provide statutory leave protections for survivors of domestic violence.[34] In many cases, the expansion of leave rights to the general workforce through employment standards legislation follows gains by academic staff and other unions at the bargaining table. Estimating the cost impacts of negotiated leaves involves direct and indirect compensation costs as well as operational considerations of the assumptions built into the Base Year Model.

For most academic staff, conventional paid leaves such as statutory holidays and vacations provide important personal value individually, but are not generally considered a factor in post-secondary operations or costing practices. Indeed, many academic staff association collective agreements do not reference these conventional forms of paid leave.

However, term length or full-year academic leaves are a central feature to academic staff compensation and present more complex considerations for costing. Associations can legitimately argue that paid leaves do not constitute paid time off, but rather shift the focus of productive activities from teaching to research. However, changes in paid academic

33 . For a discussion of work protection cases, see Willis, Elaine and Warren Winkler. *Willis & Winkler on Leading Labour Cases*, ed. Thomson Reuters Canada, Thomson Reuters, 2015. Chapter 2, in particular, the discussion of the cases Athabasca University Governing Council and CUPE, Local 3911 (Employee Status), Re (2012), 224 L.A.C. (4th) 1, 112 C.L.A.S. 273, 2012 CarswellAlta 1775, [2012] A.G.A.A. No. 55 (Sims, Ross, Furlong), 244 L.A.C. (4th) 1, (sub nom. CUPE Local 3911 v. Athabasca University) 2014 C.L.L.C. 220-040, 240 A.C.W.S. (3d) 456, 2014 CarswellAlta 782, 2014 ABQB 292 (Alta. Q.B.) demonstrates the difficulty academic unions face when trying to control the various forms of instructional work at universities.

34 . For a review of domestic violence leave legislation see http://makeitourbusiness.ca/blog/most-canadian-provinces-are-providing-domestic-violence-leave.

leaves do pose new costs to administrators when replacement instructors or substitute librarians are needed to perform the teaching related duties of the staff member on leave.

Replacement Costs for New Leave Provisions

Existing leave provisions do not require special treatment under this costing method.[35] The Base Year Model assumes the operational characteristics of the institution and the composition of the bargaining unit will remain relatively stable in the short term. The composition of the bargaining unit last year, including the number of academic staff on various types of leaves, will be similar to the composition over the next few years. The number of staff working during this reference year included those needed to cover for those on leave. Similarly, the operations of the institution, especially the number or courses delivered and other academic work performed by the bargaining unit will also remain relatively stable.

Existing leave provisions are already accounted for in the Base Year Model. However, the costs associated with new leave provisions will depend on a number of factors with the replacement cost ratio being the central factor in the estimate. In theory, replacement costs can vary widely. At one end of the scale, the university or college may experience actual savings when a high-salary academic employee takes an unpaid leave and no replacements are hired to teach those courses or take on their responsibilities. In contrast, paid leaves requiring full replacements, such as hiring more regular, full-time academic staff, may result in a replacement cost ratio that is equal to a factor of one or more. In other words, for each bargaining unit member taking a paid leave, another person has to be hired to do the work. Compensation costs are twice as much for the same amount of work.

Costing Unpaid Leaves

By definition, employees do not receive salaries during unpaid leaves, but such provisions may still impose costs to the employer. Strategically, if the union is simply introducing new, statutory leave rights into the collective agreement, these should not be costed by the union as they do not reflect new rights or benefits requiring a negotiated settlement. The law already requires the employer to provide these employment standards, so any associated costs would not be the result of collective bargaining.

However, if the union is seeking to secure a greater right or benefit, above the statutory minimum for unpaid leaves, or a new type of leave not mandated by statute, it would be useful to assess the proposal for potential cost impacts. The following steps provide a method for estimating compensation and other labour costs associated with negotiating unpaid leaves.

1. Does the 'unpaid' aspect of the leave include both salary and benefits?
   a. First, clarify whether the unpaid leave provision requires employees to assume responsibility for paying the employer's share of benefit costs to maintain insured benefits, accrue pension credits, or maintain other forms of compensation during the leave.
   b. If the employer does still carry the benefit costs of the employee during the unpaid leave, include these costs in the estimate.
2. How many members of the bargaining unit will be eligible to take the unpaid leave? How many are likely to actually request the leave if they are eligible?
   a. It can be very hard to predict the actual take up of unpaid leaves and this estimate becomes less relevant if the administration retains final authority to approve the leave. Still, the union should provide a reasonable estimate for the number of employees eligible and the number likely to take the unpaid leaves.
   b. Unless there are reliable indicators to suggest otherwise, the costing model should assume that everyone eligible will take the leave.
3. How will the leave impact operations in general and course delivery in particular?
   a. Assuming that the overall number of courses offered by the university or college will remain relatively stable despite changes in individual leave status, who will perform the work? The institution or academic department may elect not to offer the particular course taught by the staff member on leave, but the costing model works at the aggregate level where the total number of courses offered will likely be more stable.

35. Other costing methods such as Granof, Michael H., Jay E. Grenig, and Moira Kelly. *How to Cost Your Labor Contract, 2nd ed.*, BNA Books, 2011., distinguish between the cost of pay for time worked from the costs associated with pay for time not worked.

4. Estimate the replacement cost ratio:
    a. For unpaid leaves, which do not require the employer to maintain any benefits, replacement costs may be fully offset by the forfeited compensation.
    b. Unpaid leaves in which the employer continues to make benefit payments may have a fractional replacement ratio because the costs of hiring a replacement are not fully offset by the saved compensation.
        i. Estimate an appropriate replacement ratio. For example, if employer benefit costs are 20 per cent of total compensation, the replacement ratio would be an additional 0.20 cost in the compensation structure based on the estimated number of staff taking the leave or courses requiring replacement.

Paid Leaves

Enhancing paid leaves has an effect similar to increasing the composition of the bargaining unit – it will take more employees to perform the same amount of work. In the postsecondary sector, short term paid leaves, such as paid bereavement leave or other paid leaves lasting 5 days or less, impose a cost on the university or college, but are not factored as changing the assumptions of the Base Year Model since they are unlikely to result in replacement costs. A class session or lab may be cancelled, but the department will not hire such a short-term contract academic employee.

New paid leaves resulting in new replacement costs, or proposals to enhance existing paid leave provisions should be costed by examining their impact on the Base Year Model. The costing method is very similar to unpaid leaves.

Costing Proposals for New Paid Leaves

1. Once again, estimate how many members of the bargaining unit will be eligible to take the paid leave.
2. Model how replacements will be managed based on current operations and estimate the replacement cost ratio.
    a. For paid leaves, the estimate for replacement cost ratios should not be less than a one-for-one, or full replacement ratio. For every academic employee eligible for the leave, the institution will have to hire an additional employee to perform those duties.
    b. Multiply the number of academic staff eligible for the new leave benefit by the average total annual compensation per FTE in the bargaining unit. Alternately, the estimates could be based on the number of courses and the average cost per cost per FTE.

Costing Proposals to Enhance Existing Paid Leave Provisions

Existing paid leave provisions can be enhanced along two dimensions – compensation and time.

1. Collect information about the number of academic employees taking the paid leave during the reference year. Unless the proposal is changing the eligibility requirements, these experience data will provide a better cost estimate than the number of employees eligible.
2. For compensation only enhancements, multiply the number of employees taking the leave by the value of the compensation enhancement.
    a. To calculate the value of a salary-related enhancement, use the weighted average total compensation for the bargaining unit.
    b. For flat rate benefit enhancements (non salary-related), simply multiply the number of employees on leave by the value of the benefit enhancement to estimate the total annual cost increase associated with the proposal.
3. For enhancements in the amount of leave time, calculate the replacement costs the same way as new leave provisions. Pro-rate replacement costs for partial years or calculate based on course replacements.
4. Enhancements along both dimensions (time and compensation) require a two part calculation.
    a. First, estimate the cost of the compensation enhancement for the member on leave for the entire proposed leave period.
    b. Second, estimate the replacement costs for the enhanced time of the leave. Again, this should be pro-rated for partial year leaves or based on course replacements.

Costing Equity of Leaves Which are Dependent on Administrative Approval

Union bargaining teams generally strive to ensure that academic staff eligible for various forms of leave are not unfairly denied the opportunity to take such a leave. However, there are many examples of administrative discretion for approving paid and unpaid leaves in academic staff collective agreements. The equity function of costing can be used to help ensure that administrative discretion does not result in disparate treatment of bargaining unit members.

During the data collection phase for bargaining preparations, the union should include requests for information related to academic staff on leave.

1. A list of the number and type of leave requests approved by the administration in the past 12 months. For each leave request approved, include the following information:
   a. Whether the leave was paid or unpaid for both salary and benefits.
   b. Length of the approved leave period.
   c. Identity of the bargaining unit member and department.
2. Identify the number, the type of leave, and the reason for leave requests denied by the administration in the past twelve (12) months. For each leave request denied, include the following information:
   a. Whether the leave request was for paid or unpaid for both salary and benefits.
   b. Length of the leave period requested.
   c. Identity of the bargaining unit member and department.

To improve the reliability of information, the union should independently track leave requests by encouraging members to share the original leave requests with the union and ask that the administration's response be made in writing and also sent to the union. Such procedures or annual reporting can be outlined in the collective agreement. Analysis of this information can identify patterns in denials and approvals and be used to advance equity in administrative approvals of leaves.

Collective Bargaining Scenarios

This section briefly reviews the application of using the Base Year Model to cost a range of typical collective bargaining proposals. For a complete case example of gathering information, developing the Base Year Model, and using the Base Year Model during negotiations, please see Section 5 – Great Northern University.

Proposals for Multi-Year Across the Board Increases to Base Salary

A common and relatively straight forward collective bargaining proposal involves multi-year, across the board (ATB) increases. These are base salary increases which are applied "across-the-board," meaning that the increases impact base wages for all job classifications, wage steps, and other designated base salaries.

There are two types of ATB increases:

1. Flat rate
2. Percentage

Flat rate increase

Proposal for annual ATB wage increases of $1,000 - $1,000 - $1,500

To "roll-up" the wage-related benefits based on flat rate increases, the template formula converts the flat rate increase into a percentage increase and applies the cost roll-up to wage-related benefits.

General wage increase	**Value**		$1,000		$1,000		$1,500		$3,500
Base salary	$85,000		1.17%		1.16%		1.72%		
Annual costs	**Base year**		**Year 1**		**Year 2**		**Year 3**		**Cumulative total**
Total annual base salary			$86,000		$87,000		$88,500		$3,500
Salary-related benefits	$25,000		$25,425		$25,832		$26,276		$1,276

Percentage increase
Proposal for ATB percentage wage increases of 1.5% - 1.5% - 2.25%

For increases to the base wage based on percentage across-the-board, increase the template first accounts for the compounding effect over multiple years. The template then applies the roll-up impact of a percentage increase to wage-related benefits.

General salary increase	**Value**	1.5%	1.5%	2.25%	5.34%
Base salary	$85,000				
Annual costs	**Base year**	**Year 1**	**Year 2**	**Year 3**	**Cumulative total**
Total annual base salary		$86,275	$87,569	$89,539	$4,539
Salary-related benefits	$25,000	$25,375	$25,755	$26,335	$1,335 (5.34%)

One-time lump sum bonuses
Lump sum payments and similar proposals should be included in the one-time benefit change category. For example the following steps can be used to calculate the cost impact of a $750 lump sum payment (pro-rated for part-time employees) in lieu of wage increases in years one and two:

1. Determine the number of employees eligible for the bonus;
2. Calculate total annual costs for the new benefit; and
3. Record these costs only in the year in which they occur.

Value		$750	$750		
		Year 1	**Year 2**	**Year 3**	**Cumulative total**
One-time benefit enhancements					
(Lump sum payment)	**Full-time**	$62,250	$62,250	$0	
	Part-time	$30,750	$30,750	$0	

Changes to Insured Benefits
To calculate the cost impact of proposals to improve dental and vision plans, follow these steps:

1. Contact the insured benefits consultant or broker to estimate increases to premium rates. (Note, the employer's insurance carrier would provide the most accurate estimates of premium changes, but that information may be difficult to obtain through the employer. Simultaneous requests to the employer and an independent broker would allow a valuable, independent assessment of the information provided by the employer. Even if the union is not proposing any changes to insured benefits, the union should request information from the insurance carrier regarding costs associated with maintenance of benefits.)
2. Calculate a new weighted average premium for insured benefits with different single and family rates.
3. Calculate the difference between the new weighted premium rate compared to the base year premium rate.
4. Calculate the total annual cost increase or decrease. (Be sure to use only the number of employees eligible for insured benefits in this calculation.)

This change would result in ongoing costs, so the line item for this compensation change would be included under "ongoing benefit enhancements."

Changes in Paid Leave Time
Employers which experience replacement or backfill costs associated with paid leave time will need to calculate the replacement cost impact of proposals to change paid leave provisions in the collective agreement. For example, the following steps should be used to calculate the cost impacts of a proposal for a change in workload for the entire bargaining unit:

1. Determine the replacement ratio (the best cost estimate will be the conservative assumption replicating the appointment type);

2. Estimate the change in the number of replacement courses;
3. Calculate the per course cost based on the replacement ratio; and
4. Calculate the change in total annual cost for each year of the proposed collective agreement.

Changes in paid leave reflect changes to the benefit cost structure and should be included as part of the category of "ongoing benefit changes."

Paid leave replacement costs							
Change in paid leave	***Replacement ratio***	**Courses year 1**	**Cost year 1**	**Courses year 2**	**Cost year 2**	**Courses year 3**	**Cost year 3**

Changes in Allowances & Other Benefits

Proposals to change allowances can involve ongoing or one-time benefit changes. To calculate the cost impact:

1. Determine whether the proposal involves ongoing or one-time changes.
2. Calculate the difference between the proposed allowance and the base year for that benefit. (For new allowance benefits, this would include all costs associated with the change.)

Summary of Changes

The individual line item calculations for each proposed change to benefits are summarized depending on whether they are ongoing or one-time, enhancements or reductions. Ongoing benefit enhancements result in changes in the base compensation structure and will therefore be included as a change added to base compensation and calculated as part of the percent increase to base compensation.

At the bottom of the template, the line titled "Cash flow (New money)" reports the total annual amount of money the proposed collective agreement will cost the employer. This cash flow is expressed in percentage terms on the last line of the template. In the far right hand column of this template, the total cost impact of changes added to the base report the ongoing structural changes to compensation.

Reporting the Cost Impacts of a Tentative Agreement

Most negotiating teams will need to report the cost impacts of a tentative agreement to a Board of Directors or other governance authorities in the organization for approval. The template worksheet titled, "Summary of changes," provides a tool for reporting such information.

					Added to base/End rate	
	Base year	**Year 1**	**Year 2**	**Year 3**	**Total**	**%**
Salaries						
Salary-related benefits						
Benefit enhancements						
Benefit reductions						
Nonwage-related benefits						
ESTIMATED TOTAL COMPENSATION						

It is important to note that base year non salary-related benefits are assumed to remain constant over the life of the proposed collective agreement. Any proposed changes are reflected in the rows for benefit enhancements and benefit reductions. To account for any operational changes which may impact the costs of non salary-related benefits, the negotiating team will need to estimate changes in the composition of the bargaining unit or workload of academic staff. It is important to clearly explain how the changes in assumptions result in the cost estimates to constituents and governance boards.