

## 2015-2016 CPFC Subcommittee to Assess Incentive-Based Budget Models at WMU Report

**Summary:** During 2014-2015, an Ad-hoc committee of the Campus Planning and Finance Council (CPFC) of the Faculty Senate was formed to report on budget models for Academic Affairs at Western Michigan University (WMU). One of the recommendations from the ad-hoc committee was to form a new subcommittee in 2015-2016 composed of both faculty and administrators to look further at the prospects of incentive-based budget models at WMU and to identify ways to achieve flexible, sustainable, and incentivized budgeting procedures within the Office for Academic Affairs. This document reports on the findings of that subcommittee. The subcommittee finds that there is little justification for a shift to a new budget model at WMU at this time. Although there are strengths and weaknesses associated with any budget model, the current Incremental Budget Model at WMU is flexible enough to build in the types of incentives that can reward efficiency and effectiveness to help achieve goals of the institution. Therefore, the report concludes with a number of proposed initiatives to increase sustainable and defensible budgeting procedures at WMU.

Overview of process: The Subcommittee met during nine sessions between Sept. 25<sup>th</sup> 2015 and March 15<sup>th</sup> 2016 to fulfill several charges:

1. Review and expand upon the CPFC Ad-hoc subcommittee report on budgeting within the Office for Academic Affairs
2. Review and propose initiatives to work with Academic Affairs on budget models that are sustainable and defensible
3. Review and provide projections for what a college budget might look like under IBM (Incremental Budget Model) and/or Responsibility Center Model (RCM) (or some alternative)
4. Review and identify how these budget models when implemented with incentives and disincentives may positively and/or negatively impact the “culture” of WMU
5. Provide a written report to the CPFC and the Faculty Senate Executive Board by March 2016

The subcommittee solicited informational presentations about budgeting procedures under the current budget model at WMU. The subcommittee also became educated on incentive-based models (Responsibility Center Models [RCM], in particular) by reading key materials and learned of such implementations at other academic institutions (see bibliography for a list of references). All of the guest speakers at the meetings spoke about potential implementations of an RCM model at WMU.

List of presenters:

Dr. Jim Gilchrist-WMU VP and CIO for Academic Affairs

Dr. Kay Palan-WMU Dean, Haworth College of Business

Dr. Ming Li-WMU Dean, College of Education and Human Development

Dr. Dan Guyette-WMU Dean, College of Fine Arts

Background:

For the purposes of this report all discussion of revenue will concern the General Fund. The General Fund (Fund 11) is composed of revenue generated by State appropriations (approximately 27%) and tuition charged to students (approximately 70%). Usage of these funds is governed by the State of Michigan and national accounting standards. It includes the “base” budget; those funds comprise the “lion’s share” of the revenue generated by WMU and are more or less permanent and budgeted for every year. The majority of these funds go towards compensation for faculty and staff, and graduate assistants. The General Fund also includes Extended University Programs (EUP)-generated revenue. Understanding the ways that the General Fund resources are acquired and distributed as well as how and why budgetary decisions are made at WMU will hopefully lead to the identification of incentives and disincentives built into the current structure and possible alternatives that will ultimately result in improved fiscal and educational conditions.

**1. Conceptual view of the current Incremental Budget Model (IBM) model at WMU:**

Figure 1 shows a simplified heuristic that captures basic aspects of the budget model used at WMU, with an emphasis on the Office for Academic Affairs (AA). The model only focuses on the General Fund (Fund 11). Since the grand majority (97%) of General Fund revenue derives from a combination of Student Credit Hours (SCH) and State Appropriations, only those sources are shown as inputs. Approximately, 30% of General Fund revenue goes to “Institutional Support”, which for the purposes of this report is defined as all areas outside of Academic Affairs. Examples of specific Institutional Support allocations are shown in Table 1.

**Table 1. Institutional Support Units at WMU Receiving General Funds. Data taken from WMU Budget Summary Document**

[www.wmich.edu/sites/default/files/attachments/u348/2015/2015-16%20Booking%20Summary%20Published.pdf](http://www.wmich.edu/sites/default/files/attachments/u348/2015/2015-16%20Booking%20Summary%20Published.pdf)

President (Athletics)	Legal Affairs/General Counsel
Business and Finance	Office of Vice President for Research
Student Affairs	Diversity and Inclusion
Governmental Affairs/University Relations	Building Debt

Of the remaining 70% that is allocated to Academic Affairs, approximately 37% of AA General Fund revenue goes to “Instructional Support”. Examples of some of the Instructional Support allocations are shown in Table 2.

**Table 2. Instructional Support Units funded by Office for Academic Affairs**

All academic Colleges (Aviation, etc.)	Office of Information Technology
Lee Honors College & Graduate College	Extended University Programs
University Libraries	Office of Institutional Effectiveness
Office of the Registrar	Undergraduate Studies and Assessment
Office of Admissions	Office of Faculty Development
Advising Offices & First Year Experience	Center for Academic Success Programs
Student Financial Aid	Faculty Senate & WMUK
Haenicke Institute for Global Education	Office of Institutional Research

The remainder of General Fund allocations (ca. 44% of total revenue after Institutional and Instructional Support costs are accounted for) go to directly support Instruction at WMU. Instruction allocations to individual colleges within AA are allocated based on previous year levels under the IBM; however, in situations when budget cuts need to occur or if new budget protocols are to be implemented, the Provost's Council (Deans and heads of AA units) will meet to make decisions about new levels of allocations. In recent years, budget cuts have been based (at least in part) on enrollment trends of each College. It should be noted that, of the Instructional budget for any given college, >95% of the funds are committed to continuing Faculty and Staff compensation. Given the nature of continuing appointments and negotiated labor agreements these may be considered "fixed costs", and as a result few pools of uncommitted, discretionary funds exist. Thus, only when administration, faculty or staff vacancies arise does some degree of budgetary flexibility exist. Discretionary allocations within a college are largely controlled by Deans, often with consultation with Chairs and Directors. Any un-used funds at the end of a fiscal year are swept back to the Provost's office with a subsequent 70-80% return to Colleges. These constraints, especially in times of declining enrollments and budgets, make it difficult for colleges to plan for "rainy days" or save pools of monies to fund innovative initiatives that might boost enrollments.

This type of budget model has advantages which include: 1) ease of use, 2) relative ease of tracking and 3) it may reduce intercollege conflict and direct competition over fund allocation. Thus, in essence, this budget model ensures that all Academic Affairs program costs are covered even if one unit shows a net loss. It ensures that the "greater good" continues at WMU.

This type of budget model has short-comings which include: 1) it may be seen as discouraging innovation because if new initiatives emerge within a departmental unit that require additional revenue, funds are unlikely to be available, 2) if unforeseen budgetary changes occur there is little cushion because the same amount of funds are allocated each year, 3) it may promote a "use it or lose it" mentality to spend funds before the end of the fiscal year, and 4) at WMU, one of the main perceived problems is that budgets may be cut for an academic unit even as they continue to generate a large amount of tuition revenue.

Finer details of the WMU IBM budget model are difficult to conceptually represent partly because of the different models applied to summer teaching and EUP. While these only account for a relatively small proportion of the overall General Fund budget (ca. 5 & 12%, respectively), they are important to understand but are outside of the scope of this report.

## **2. Conceptual view of a Responsibility Center Model (RCM) at WMU:**

Figure 2 shows what a simplified RCM could look like at WMU. Figure 2 distills down numerous complexities of an RCM in order to provide a conceptual perspective and allow for comparison to our current IBM model. Under any budget model, funds will still need to be allocated to Institutional Support. The total overall costs for Institutional Support do not differ under RCM; however, an individual College may pay more or less based, to a limited degree, on their costs to the institution. Such costs would include electricity, maintenance, landscaping, etc. Likewise, each college will need to cover costs associated with Academic Support within AA. Those total overall costs for Academic Support are not likely to change with a different budget model but the share covered by each college might be controlled to a limited extent by cost-cutting by individual units. However, how cost savings are ultimately achieved under RCM would depend on how Academic Support fees were assessed (often these are assessed on a per FTE count basis). Under such as scenario, cost-cutting would likely be limited to lay-offs to

reduce FTE counts. Finally, subventions would need to be built into an RCM in order to help fund units that cannot cover the costs of instruction based on the combined SCH generated and State allocations received. Thus, depending on the particular college, subventions may flow into or out of the revenue stream prior to being allocated to departments.

Under the RCM budget model advantages may include 1) units may be incentivized to cut costs and maximize revenue in order to work towards programmatic goals, 2) individual units may become empowered to innovate and adapt based upon annual allocations that they have more control over, 3) units may be able to save resources to achieve important goals, and 4) the model can be structured to incentivize the behaviors the institution wishes to promote.

Under RCM, there are disadvantages that may include 1) some units may not be financially profitable under this model, 2) individual units need to take on a larger amount of responsibility than they currently have done (for instance, units will need to cover costs associated with running the program including building costs [electricity, maintenance, debt service] and grounds [landscaping, etc.] as well as other instructional costs that contribute to the core academic mission including those associated with the student experience like enrollment management and libraries), and 3) when enrollments drop, colleges may be faced with having to lay-off faculty and staff.

Differences between the RCM (Fig. 2) and the current IBM model at WMU (Fig. 1) are several:

A. Under RCM, Colleges receive revenue based on the amount of SCH generated. Under the current implementation of IBM at WMU it is not clear if SCH-generated revenue is or is not allocated on that basis. Under both models, State appropriations would be allocated to colleges. Under RCM, an explicit formula would be applied to allocate funds and might take student headcounts and course completion and graduate rates into account. Under IBM at WMU, it is not clear how State appropriations are allocated.

B. Under RCM, colleges may engage in cost-saving measures that directly impact the revenue received after Institutional and Instructional costs (and subventions, if assessed) are accounted for. Under the current IBM implementation at WMU, few mechanisms exist to allow for cost tracking such that cost-savings could be passed on to individual Colleges. Such considerations may currently be taken into account but in an implicit way that remains unclear to most stake-holders.

C. Under RCM, if a college has surplus funds after covering costs for instruction and subventions, those pools may, in principle, be saved for the future, or applied to initiatives. Under the current IBM model at WMU this is not the case but potentially could be.

D. Under RCM, for any college that receives subventions, no additional revenue would be expected beyond what is generated. Over time, it is expected that such colleges would need to cut costs in order to become financially solvent or operate under institutionally-agreed upon levels of subvention. Under the IBM at WMU, allocations are distributed to cover all of the costs of each unit. Although this is presented as a difference between the two budget models, the end result is essentially the same.

In summary, although there are differences between the two models, the current IBM budget model at WMU is flexible and may be able to build in the perceived advantages of an RCM (see initiatives below) without the inherent disadvantages.

### 3. Projections for a College at WMU under an RCM

All RCM models applied to academic institutions are complex and require institution-level decisions about percentages of taxes and formulae for assessing costs. Therefore, the prospect of projecting revenue for any particular WMU college under an RCM is impossible to perform with a high degree of accuracy at this time. Nonetheless, we have endeavored to project College of Arts and Sciences (CAS) revenues under a hypothetical RCM that maximizes comparability to the IBM model WMU currently implements. No attempt was made to incorporate revenue generated from EUP since that would not likely differ under the two models.

Under any RCM, allocation of General Education (GE)-SCH is a complicated procedure. Decisions must be made about how the “college of origin” (say, College of Engineering for the sake of discussion) and “college of content delivery” (say, College of Arts and Sciences, for the sake of discussion) agree to cover costs. In a rare number of RCM models, the college of content delivery receives 100% of GE-SCH revenue generated. In others, the college of origin receives some proportion of the SCH generated. Philosophical and financial justifications exist for each scenario and we have provided a range of possible percentage of SCH return, in order to investigate the potential effects on revenue projections for CAS. The revenue calculations did not adjust for different tuition costs across colleges.

Table 3 shows revenue projections for CAS under a hypothetical RCM. Several simplifying assumptions went into the generation of the projection and these are all highlighted in yellow in Appendix 1. Under a 50% return to the college of origin for GE-SCH, CAS would actually receive \$7.1 million less funds than they currently do under IBM (See Table 3 and Appendix 1) whereas under 75% return, CAS would receive about \$2.0 million dollars less revenue allocation than they currently do. Although it would be an unusual RCM practice, if WMU were to implement 100% return on GE-SCH, CAS would receive approximately \$2.5 million dollars more than they currently do under IBM. These projections must be considered approximate due to the numerous assumptions and simplifications made. Also, it should be noted that no subventions were assessed in this projection although a % return on General Education SCH could be seen as a type of subvention for the college of origin.

Table 3. Budget projections for CAS assuming 2014-2015 allocations under three levels of return on General Education SCH

% Return on Gen. Ed. SCH	100%	75%	50%
Projected RCM Balance	\$61,198,262	\$56,663,380	\$51,529,986
Actual IBM Allocation	\$58,629,985	\$58,629,985	\$58,629,985

While the Dean of any college might like the thought of potential excess revenue under a switch to a different budget model, it must be emphasized that the idiosyncratic nature of enrollment changes over time make the responsibility of managing such funds fraught with a high level of uncertainty. For instance, given the unambiguous and linearly decreasing five year trend of SCH and headcounts in CAS (-5% each year), any projected small revenue advantage of RCM for CAS projected now could quickly disappear, potentially leaving the College to face

lay-offs. For example, under a 5% decrease in CAS headcount and SCH generation, CAS would receive less under RCM than current allocations (see Table 4 and Appendix 2 for details).

Table 4. Projections for CAS under a 5% SCH & headcount decline as compared to Table 3.

% Return on Gen. Ed. SCH	100%	75%	50%
Projected RCM Balance	\$58,138,018	\$53,829,734	\$48,952,843
Actual IBM Allocation	\$58,629,985	\$58,629,985	\$58,629,985

Given that these estimates probably represent maximum estimated revenue balances, it is likely that CAS at WMU would not financially benefit from a shift to RCM at this time.

#### 4. Current institutional environment:

WMU is currently involved in several institution-wide changes to 1) strategic planning, 2) general education reform, and 3) leadership, including a Dean search for CAS and potential presidential search in 2017. These impending changes lead to a large degree of uncertainty as to how instruction may be impacted at WMU. Furthermore, the shepherding of the institution through a highly complex and potentially expensive transition to a new budget model would be difficult to achieve, especially given that too many variables remain uncertain with respect to actual program costs. Therefore, the subcommittee has agreed that the current environment is not conducive to significant budget model changes.

The subcommittee is also of the view that WMU is not currently suffering from a budget model problem. Instead, the subcommittee agrees that there are revenue problems that need to be addressed but a shift to a new model will not change that situation. Given that the number of high school graduates is predicted to continue to decline for the next 10 years in Michigan and surrounding states, our enrollment and fiscal challenges are likely to continue (See “Knocking at the College Door”, 2012, Western Interstate Commission for Higher Education). In light of the forecasted decline, it is imperative that WMU works to engage in budgetary activities that have the potential to make the most efficient use of resources possible. Below, the subcommittee presents several initiatives that could be easily and swiftly adopted within AA that could have immediate and lasting impacts on individual instructional units to help achieve the educational objectives of the institution. To the extent that the current IBM WMU budget model allows for some degree of incentive-based approaches, we do not find significant problems and do not think that it is prudent to fix something that is not demonstrably broken.

#### 5. Proposed initiatives:

We propose several initiatives that AA could consider and would likely have immediate impact and come at little cost.

##### A. Continue the engagement of this subcommittee for general budgetary matters at WMU:

The 2015-2016 CPFC Subcommittee to Assess Incentive-Based Budget Models at WMU brought together stake-holders at multiple levels in the university and this resulted in an unprecedented level of discourse and critical, honest examination of budgetary conditions at WMU. We believe that continued discourse could result in more integration and cooperation amongst the numerous units within WMU to implement more budgetary procedures that advance the multiple missions of the university. The committee should be renamed to reflect the desired

emphasis on the assessment of general budgetary matters at WMU. At a minimum, this subcommittee should continue to include faculty from CPFC and representatives from Academic Affairs and the Office of University Budgets and Financial Planning to insure continued refinement of the current mixed budget model and clarity regarding budgeting procedures at WMU.

**B. Allow carry-forwards:** Colleges and departments within the university should be able to carry forward monies at the end of the fiscal year. The use-it-or-lose-it mentality that is forced upon academic units that are frugal is not conducive to long term budget planning for a particular academic unit. Allowing units to use surpluses in future budgeting periods could allow longer term planning for new initiatives and growth strategies as well as to provide monies that may compose “rainy day” funds. While carry-forwards may not represent substantial pools of funds, they may accumulate over time such that significant initiatives may eventually be funded.

In order to keep carry-forwards, units could provide justifications in the context of planning. Likewise, if AA sweeps money back from a unit, the office should provide transparent justifications for why money is taken back. This would provide for a desirable level of accountability for use of the funds.

**C. Provide enrollment incentives:** There must be financial incentives to increase enrollment and retention. Colleges that are being innovative and proactive in recruitment approaches and increase student numbers should receive financial benefits in addition to their yearly budgeted amount from Academic Affairs. Ideally, the enrollment targets would be established and communicated to everyone within a college so there are joint efforts toward meeting those goals. However, incentives must be balanced by the available capacity of various programs. Therefore, we advocate for improved capacity estimates on a program-by-program basis in order to maintain high quality instruction at both the undergraduate and graduate level. For those programs that cannot increase student numbers due to accreditation restrictions, being able to recruit high quality students should be recognized.

Since 2015, AA has already provided small supplemental allocations as enrollment incentives and this practice is encouraging. We strongly support the practice but encourage more sophisticated approaches that perhaps take into account departmental growth rather than simple College-level enrollment increases.

**D. Increase transparency of resource allocation within AA:** We encourage the administration to be more transparent regarding resource allocation and reporting. Ideally, budgetary allocations made at the level of the Provost, as well as the Dean, would be communicated to faculty on an annual basis. The use of a common standard for reporting financial allocations would ensure the same level of information is received by all faculty and would facilitate a more widespread understanding of budgetary matters at WMU. Such communication to share-holders in the campus community could promote cultural shifts that lead to ever more efficient use of available funds.

**E. Work to determine true costs of programs:** One way to increase fiscal efficiency at WMU is to understand the costs of our programs. This would allow the Provost and Deans to make more informed decisions about the expense side of instruction. At the same time, it would allow

Departments to understand that expenses could be reduced by simple behavior modification (eg. turning out lights when leaving a room). If the university could revamp its information systems to track and assign costs to academic units, the entire campus community would learn about the cost implications of all practices. Ideally, Academic Affairs would engage a project with Business & Finance to expand the current accounting system to determine costs by program. This would be a major project but one that could be a benefit for many initiatives on campus.

**F. Work to improve marketing of WMU academy:** As a Carnegie Research University, WMU has a wealth of exciting research conducted by faculty that engages students. While it is clear that we are student-centered and discovery-driven and the 4<sup>th</sup> highest ranked public school in Michigan according to US News and World Reports, it remains unclear why this high quality does not translate into increased applications for admission and enrollment. Thus, we believe that initiatives to conduct market research and, subsequently, develop marketing campaigns could be beneficial. We advocate for effective marketing strategies to inform potential students and the broader community about the activities of WMU faculty so that an enrollment strategy can be implemented to help meet institutional goals.

**G. Simplify tuition structure and budgeting in AA:** AA budgeting horizon is currently for one year, which does not support long term strategic planning at the college level with respect to financial resources. AA should consider working with University Budget Officers to extend the budget horizon to multiple years. We also advocate for a streamlined tuition structure that goes away from flat rate tuition because it makes it too difficult to make financial projections, particularly since we have so many variations. Additional simplifications might include providing reciprocity for neighboring state residents. Potential revenue declines might be forecast and offset by, for example, one time increase in tuition. Such bold decisions may provide for revenue that can be invested through incentive-based allocations. We also advocate for revision to the Summer teaching budget model.

**H. Use planning to inform resource allocation:** Use an academic program review process to help guide resource allocation in the context of the University strategic plan. An aspirational strategic plan with objectives tied to measureable outcomes could chart the course of budgeting, thereby providing financial motivation to achieve major goals/objectives. Currently, the only major incentive appears to be enrollment growth; other incentives that are tied to metrics should be identified, for example quality programming or graduate program growth. Given the projected decline of the Michigan high school population and necessary increase represented by other segments of the population (such as second career adult students), program growth should be closely examined. Program review results could allow for informed decisions about program investment as the student mix changes and curricular demands shift.

Subcommittee members:

**Kelly Ackerson:** Associate Professor, Bronson School of Nursing

**Todd Barkman:** Professor, Department of Biological Sciences

**Cheryl Bruey:** Master Faculty Specialist, Department of Theatre



**Barbara Frazier:** Professor, Department of Family and Consumer Sciences  
**Tycho Fredericks:** Professor, Department of Industrial and Entrepreneurial Engineering and Engineering Management  
**Dawn Gaymer:** Associate Provost for Extended University Programs  
**Jim Gilchrist:** Vice Provost for Budget and Personnel and CIO for Academic Affairs  
**Katherine Joslin:** Professor, Department of English  
**Jerry Kreuze:** Professor, Department of Accountancy  
**Sherine Obare:** Interim Associate Dean, College of Arts and Sciences  
**Colleen Scarff:** Executive Director of University Budgets  
**Ann Tyler:** Associate Dean, College of Health and Human Services  
**Bret Wagner:** Faculty Senate Executive Board member & Associate Professor, Department of Management

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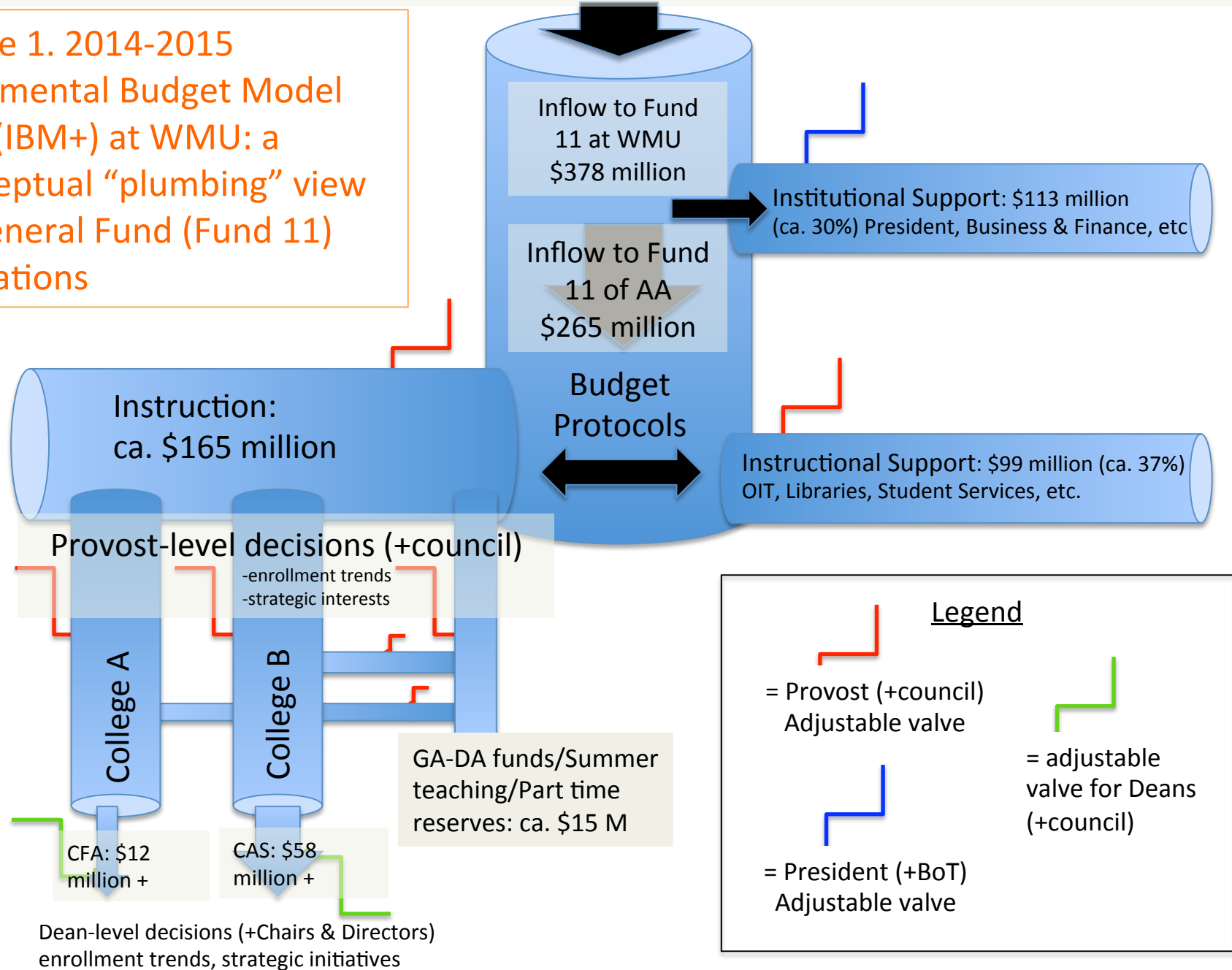
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SCH (student credit hours (\$266 million) + State Appropriations (\$102 million) + misc. (\$10 million)

Figure 1. 2014-2015 Incremental Budget Model plus (IBM+) at WMU: a conceptual “plumbing” view of General Fund (Fund 11) allocations



**Figure 2. Simplistic & Hypothetical Responsibility Center Model (RCM) at WMU: a conceptual “plumbing” view of General Fund Allocations**

**Legend**

**= President (+BoT) Adjustable valve**

**= Provost (+council) Adjustable valve**

**= adjustable valve**

Deans (and departments) can adjust the handle to some extent by cost-cutting

