

AN INCREMENTAL COST ANALYSIS APPROACH TO CLASS CANCELLATION DECISIONS

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North Central Michigan College

MI/AIR Conference

November 3, 2017

Class cancellation process at North Central

- *Meeting normally held in week prior to classes starting.*
- *Minimum size traditionally has been 10, although that's crept down in recent years as enrollment has waned.*
- *Aggregate economic analysis based on total college expenses and revenue due to tuition.*
- *Exceptions often made (more on that later).*
- *Could get contentious, territorial and personal.*
- *Absolutely nobody liked the meetings.*

New approach

- *Profitability is too difficult to ascertain, depending on lots of direct and indirect costs and different revenue stream.*
 - *Not really the goal of the college, anyway.*
- *Look at each section and its impact on the college if it were to be cancelled.*
 - *Positive or negative effect?*
 - *Would the college benefit or be hurt if a section were cancelled?*
- *Reduces problem to analyzing only direct expenses and revenues.*
 - *Focused on “bubble” sections*
 - *Only concerned with effect of cancelling*

Analyze section enrollment

- *Number of students*
- *Residence of students (in/out district, out of state)*
- *Discounts of students (senior, employee, other)*
- *Early College tuition discounts*
- *No fees were included*

Analyze section expenses

- *Adjunct taught– will save the cost of instruction*
- *Full-time taught–*
 - *If part of contractual load, then will bump adjunct, thus save adjunct pay.*
 - *If overload, will save overload rate.*
- *Include pro-rata full-time benefits (FICA, retirement)*
 - *Base salary and medical benefits are fixed and sunk; not considered.*
- *Include adjunct pro-rata expenses, including staffing company premium.*
- *Off-campus room rental.*
- *Reduced instructional expense for “piggy-backed” sections.*
- *Ignore indirect administrative expenses*

- *Developed several years ago, ran shadow process for a few semesters*
 - *Compared actual with calculated cancellations*

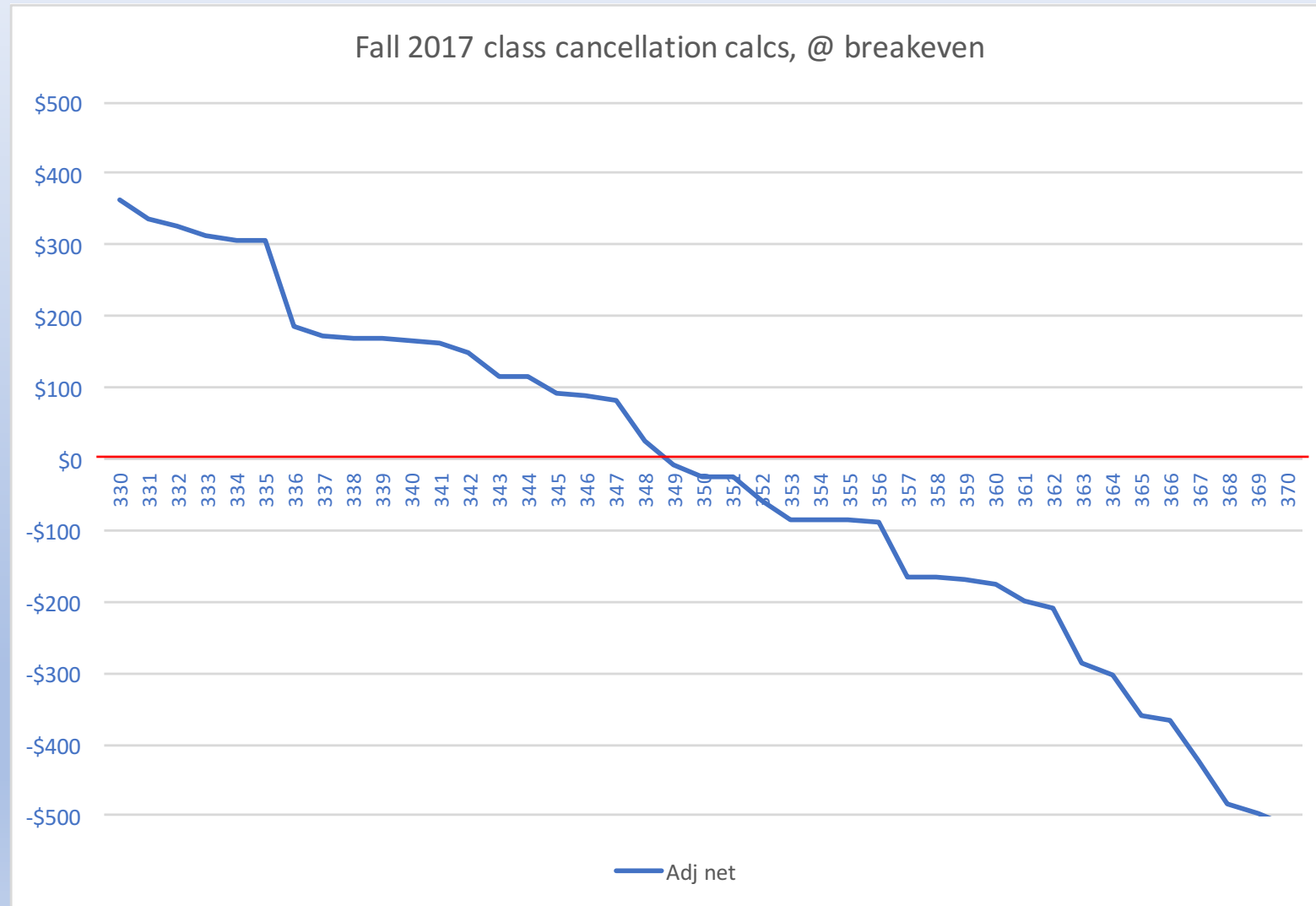
Process

- *Spreadsheet calculations done day of cancellation meeting*
- *Sections are ranked by benefit/cost to college of cancelling*
- *Larger sections ranked higher*
- *Look for breakeven point, below which no sections “should” be run*

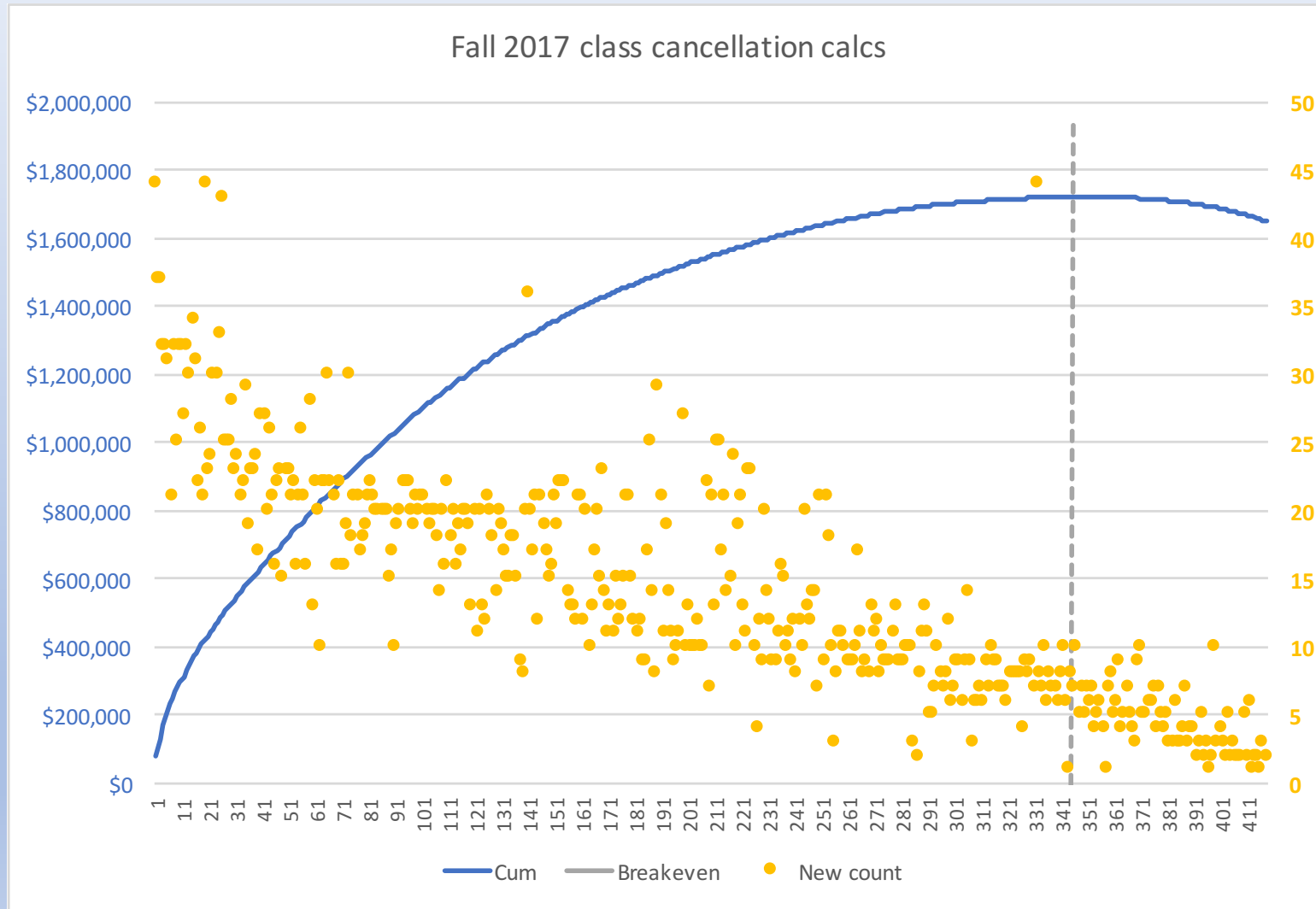
Section listing

Section	Enroll	Net	Cum Net
NUR 110 A	41	\$80,488	\$80,488
NUR 210 A	37	\$48,268	\$128,756
NUR 230 A	37	\$40,213	\$168,968
BIO 235 F	32	\$22,493	\$191,461
BIO 235 C	32	\$21,673	\$213,134
...
ARTS 236 A	10	\$82	\$1,721,175
ENG 242 OL A	5	\$26	\$1,721,201
PLS 141 B	7	-\$8	\$1,721,194
MATH 120 C	5	-\$26	\$1,721,168
CIS 127 A	7	-\$27	\$1,721,141
SPAN 211 A	6	-\$57	\$1,721,084

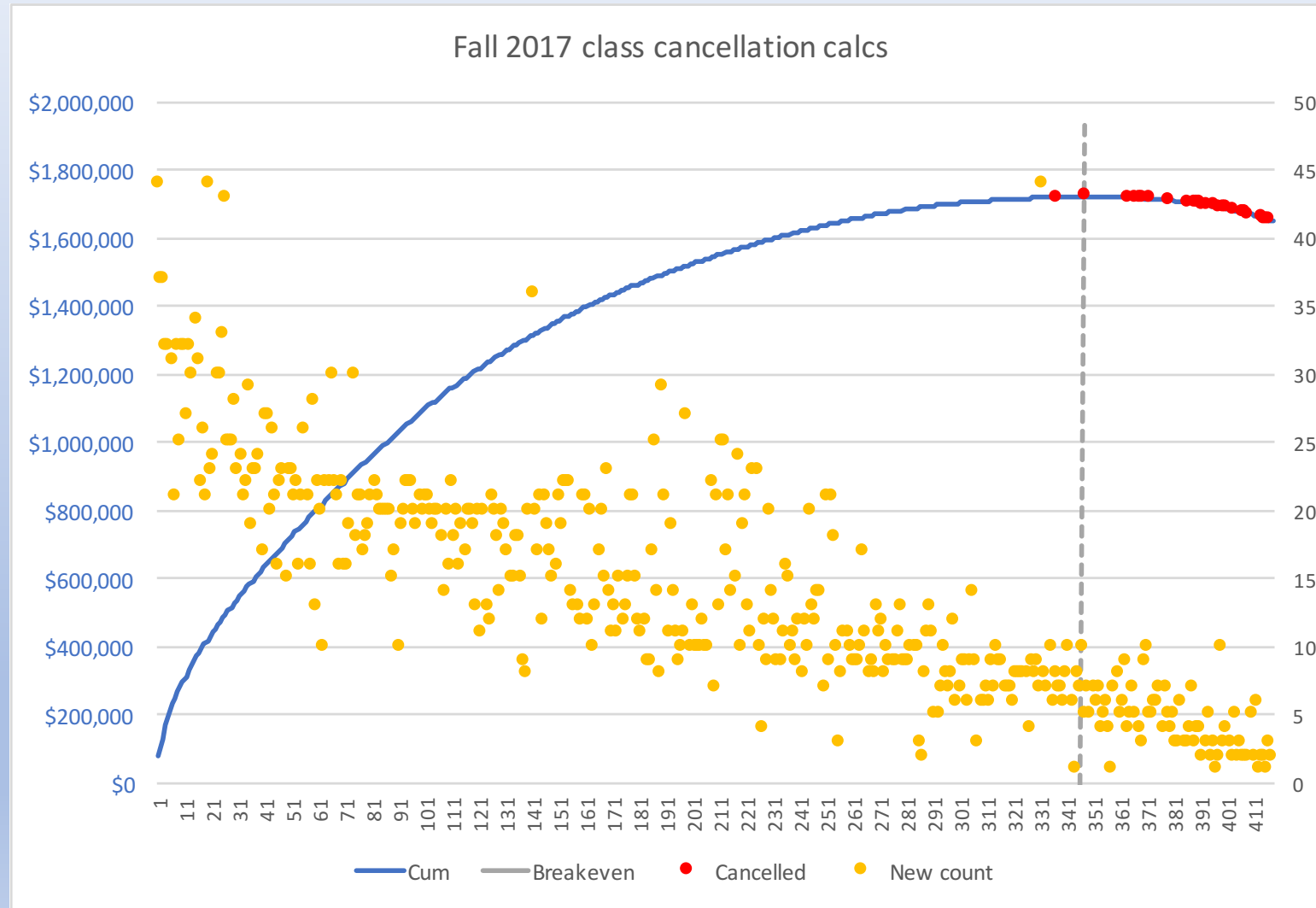
Net curve at breakeven



Cumulative benefit/cost, class sizes



Cumulative benefit/cost, actual cancelled



Section listing- cancellation

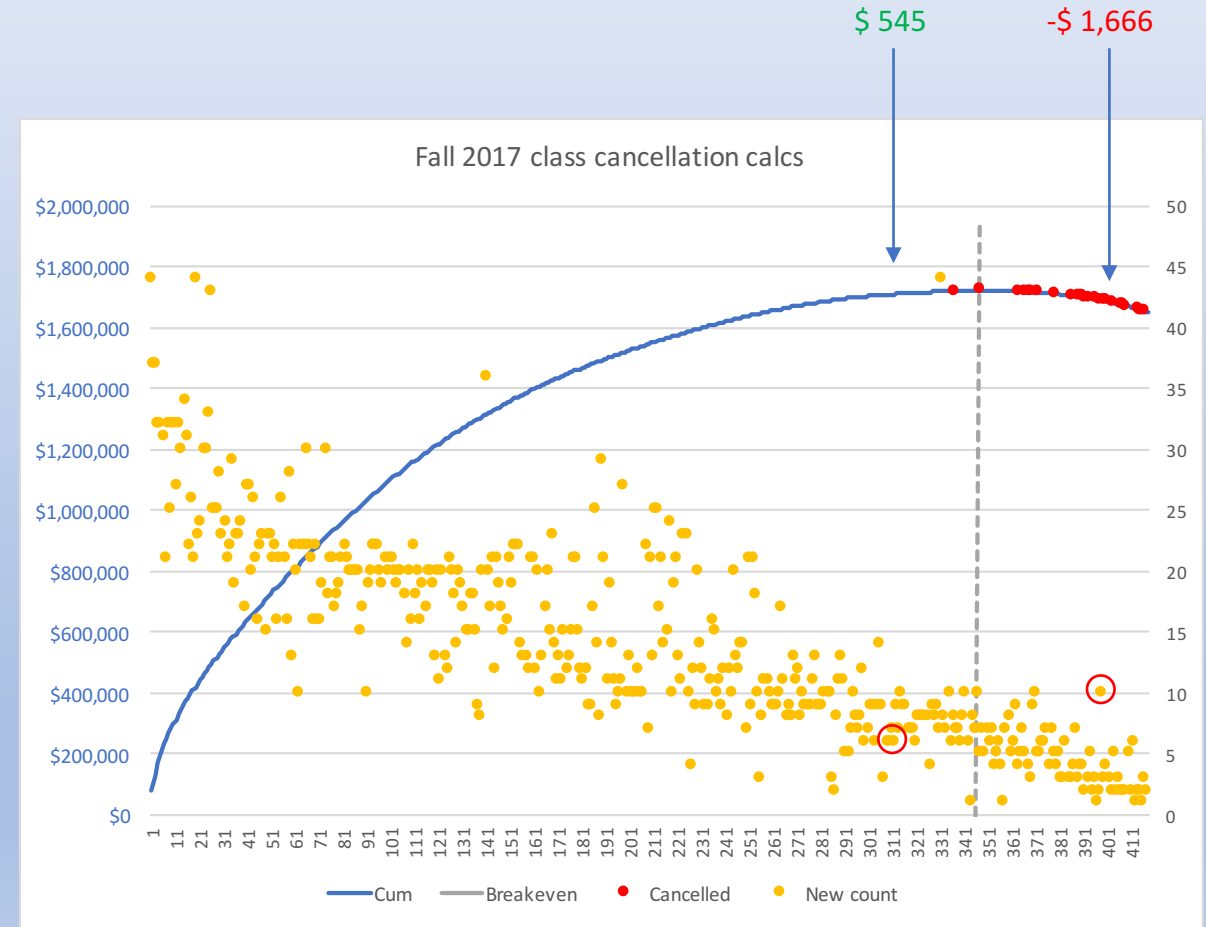
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Identify exceptions

Low (discounted) & high (out of district) tuition sections

Section	Fac type	Hrs	Tuition cde	Discount
PE	P	3	OD	
PE	P	3	ID	S
PE	P	3	ID	S
PE	P	3	ID	T
PE	P	3	ID	S
PE	P	3	ID	S
PE	P	3	ID	S
PE	P	3	ID	S
PE	P	3	ID	S
PE	P	3	ID	S

Section	Fac type	Hrs	Tuition cde	Discount
SOC	P	3	OD	
SOC	P	3	OD	
SOC	P	3	OD	
SOC	P	3	OD	
SOC	P	3	OD	
SOC	P	3	OD	



Overall experience

- *Used in actual process Fall 2017*
 - *Worked reasonably well*
 - *Especially useful for identifying non-paying (discounted) students*
 - *Made a difference in the decision for some sections on the bubble*
 - *Was another tool in the decision-making process*

Economics aren't the only thing

- *Other reasons to run small sections*

- *An upcoming graduation requirement for a cohort of students*
- *An upper-level, advanced course that is typically undersized*
- *Part of a new program the college is trying to nurture and grow*
- *Late starting, anticipated enrollment before it begins*
- *The second (or third) course in a sequence that was started with the assurance that it would be completed*
- *The only one of its type being offered or the only one in a certain location*
- *Needed for FT faculty load*

Questions?

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