

January 2017

Authors: Rishon Benjamin<sup>1</sup>, Sidney Biddle<sup>2</sup>, Brian Daly<sup>2</sup>, Andi Huffman<sup>2</sup>, Owen Jappen<sup>2</sup>, Mary Lynch<sup>2</sup>, Monica Mellinger<sup>3</sup>

(1) Delaware Valley Section, (2) Local Sections Committee, (3) AIChE Staff

### **Executive Summary**

A survey was conducted of all local sections and the results of that survey were compiled into leading and lagging metrics to measure the health of the sections. Sections were analyzed overall as well as grouped by member sizes: small (<100), medium (101-200), large (201-300), and extralarge (>300).

The 2016 data showed that there has been a slight improvement in AIChE's local sections' programs overall despite a net reduction in the number of sections which may reflect the efforts of the Local Sections Committee to reduce long-term inactive sections on the list that were not removed in previous years. Small, medium and extra-large local sections all saw slightly improved leading metrics in 2015 showing that there are more positive things happening within local sections to support their overall health. Small sections were the weakest at fresh leadership with a low repetition of officers, and they are also the least likely to have websites. All sections saw a decrease in student chapter activities. Large sections are much more successful at maintaining a Young Professional group than sections of other sizes.

In comparison to 2015's data, across the board, sections of each size saw lower lagging metrics indicating that there are fewer things to be concerned about within the section. Extra-large sections had a much lower average lagging metric, demonstrating that higher membership numbers lead to better resources and higher performance. The ratio of leading to lagging metrics improved between 2015 and 2016 for sections of all sizes meaning better health of local sections in 2016.

The lagging metrics were found to be independent of the size of the section, and the leading metrics were dependent on the size of the section. This shows that leading metrics vary from section to section, but the lagging metrics are similar issues that weigh sections down equally. Based on these findings, the Local Sections Committee (LSC) has decided to focus its support on improving the lagging metrics across all sizes of local sections while local section leadership should focus on continued growth of their leading metrics. Additionally, focus should be toward supporting small and medium sized sections due to having weaker leading metrics. Finally, the LSC should reach out to all lagging local sections individually to determine support needs. Sections are also encouraged to make contact with the LSC focusing on areas where their results have identified deficiencies.

Moving forward the LSC will continually evaluate the Annual Report with regard to feedback from these groups in order to improve the report as needed. The LSC will also provide individualized feedback for each section based on their breakdown of leading and lagging metrics scores. Consistent survey design and response rate will allow the LSC to determine effectiveness of the annual report and local section assistance programs.







1		Introduction							
2		Met	ology	4					
	2.	1	Que	estion Development	4				
	2.	2	Surv	vey	4				
		2.2.	1	Organization	6				
		2.2.2		Media	6				
		2.2.	3	Involvement	6				
		2.2.	4	Demographics	7				
		2.2.5		Overall Metric Calculation	7				
3		Results		and Discussion	8				
	3.	1	Ove	rview of Local Sections	8				
	3.	2	Surv	vey Participation	9				
	3.	3.3 Ge		neral Findings	.11				
		3.3.1		Leading and Lagging Metric Comparison	.11				
		3.3.	2	Breakdown by Section Size	.12				
	3.	3.4 Op		en-ended Questions	.15				
	3.	5	Con	nparison to Past Results	.15				
		3.5.	1	Discussion of Organization Metrics and Recommendations	20				
		3.5.2		Discussion of Media Metrics and Recommendations	.21				
		3.5.3		Discussion of Involvement Metrics and Recommendations	22				
		3.5.	4	Discussion of Demographics Metrics and Recommendations	24				
	3.	6	Con	clusions	.25				
4		201	2016 Recommendations						
5		Loo	ooking Forward27						
6 Acknowledgements									
Α	рр	endi	х A		.29				



January 2017

### 1 Introduction

Local sections are instrumental for the success of AIChE as an organization because of their potential to exhibit the numerous benefits that come with being part of the Institute in a more frequent and personal way. Furthermore, the members of these sections can serve as a talent pool for crafting a new generation of leaders for our Institute.

In 2014, a systematic and sustainable methodology was developed to measure of the health of the local sections. The survey and analysis helped to identify areas for supporting the local section executive boards in addition to measuring performance of initiatives and programs across AIChE.

Primarily, the health of a local section depends on its ability to:

- 1. Remain organized at the board level.
- 2. Remain relevant to its members.
- 3. Remain financially stable.
- 4. Recruit new members.
- 5. Maintain healthy member involvement.

Based on these above criteria, the 2014 Recommendations Report of the AIChE President's Blue Ribbon Task Force on Local Sections (BRTFLS) defines the two major categories of metrics as follows:

**Leading metrics:** Performance indicators that peak before a local section declines and bottoms before a local section improves. Having a high leading metric indicates a healthy local section, while a low leading metric means there is room to improve.

**Lagging metrics:** Performance indicators that peak after a local section declines and bottoms after a local section improves. Having a high lagging metric indicates there is room to improve within the local section and a low lagging metric indicates a healthy local section.

Despite the generality of these metrics, not all sections can be measured the same way. There are many factors that affect operations of the section, i.e. number of members, industry type and diversity, geographic extension, presence of other professional societies, etc. These considerations add another dimension of variability to any comparison of local sections. Nevertheless, the vitality of each section depends on its leaders and their creativity to advance our profession in all its shapes and forms.

In order for the Annual Report to be effective and beneficial in accomplishing the goal of making AIChE a data-driven organization, continued data collection made priority in 2016 as well. As was performed in 2015, diligent data collection and analyses were used in 2016 to ensure that the leading and lagging metrics can be used to predict the bottom/peak of a local section and that the AIChE Local Sections Committee can render assistance as and when necessary. Feedback from local section leaders from 2015 was taken into consideration when designing the 2016 Annual



January 2017

Survey and Report. The sections had 30 days to complete the online survey. LSC encouraged all sections via email to answer the survey.

This report highlights the methodology created and used for developing metrics and the survey since 2014. It continues with the analysis of the data obtained through the annual survey and its comparison of results to 2014 and 2015 data. Most importantly, the sections' health is compared to the results from the year 2015. Based on the 2016 data analysis, recommendations for improving the health of Local Sections and future annual surveys are then discussed. Finally, future work for advancing the annual survey is described so as to make the analysis and data-collection effort more effective.

### 2 Methodology

### 2.1 Question Development

BRTFLS provided a bank of potential questions for the survey based on target areas recognized by the Institute and from information exchanged with other professional organizations. In addition, some other questions were formulated with the insight of local sections leaders.

The question selection was based on three major considerations.

- 1) To have questions simple enough so that section leaders could answer easily and/or LSC could gather data from existing databases.
- 2) The answers must be able to be translated into numerical values in order to perform statistical analyses to assess the health of the local sections.
- 3) The questions had to address the following 4 focus areas:
  - Organization
  - Media Outreach
  - Involvement
  - Demographics

### 2.2 Survey

Fifteen closed-ended questions were identified and used in 2016. After consideration of feedback from local section leaders, the questions included on the survey did not change from 2015 to 2016. All questions were sent to section leadership to gather statistical data that will measure the performance of each section's leading and lagging metrics or by peer comparison. Furthermore, these questions make it possible to evaluate sections against past performance in the recurring surveys. An additional open-ended question is included in order to capture subjective input from each local section. The survey questions are presented in Table 1 followed by the rationale of each question and brief descriptions of the algorithm used to evaluate the data input. "Yes" responses are represented by a value of 1 in question score and metric calculations. "No" responses are represented by a value of 0.

**Local Sections Committee** 

January 2017

Table 1. List of survey questions. Sections 1-5 filled by sections' leaders. Data for Section 6 collected from LSC current databases.

#	Category	Description	Answer Choices	Metric Type
1.1	Organization	Did the section hold officer elections in accordance with the local section's by-laws?	Yes/No	Leading
1.2	Organization	Based on required officer positions detailed in your by-laws, what percent of all officer and board member positions were not filled?	0-100%	Leading
1.3	Organization	Are one or more of the elected officers repeating terms? If so, what is the average number of repeat terms?	Number	Leading
1.4	Organization	Did your section file a local section annual report within the last two years?	Yes/No	Leading
1.5	Organization	Does your section fill a treasurer's report according the specific section requirements?	Yes/No	Leading
1.6	Organization	What percent of Local Sections Committee monthly meetings did the section call in to?	0-100%	Leading
2.1	Media	Does the section operate and maintain an up-to-date webpage?	Yes/No	Leading
2.2	Media	Did the section publish a newsletter (physical or digital) periodically in the last year?	Yes/No	Leading
2.3	Media	Does the section actively maintain a social media presence for communications, advertising, event info etc.?	Yes/No	Leading
3.1	Involvement	Did the section attend the Local Section Leadership Workshop meeting within the last two years?	Yes/No	Leading
3.2	Involvement	Did the section conduct any activity with student chapters in its area within the last year?	Yes/No	Leading
3.3	Involvement	Does the section have a Young Professionals group?	Yes/No	Leading
3.4	Involvement	Does your section wish to be contacted about improving Young Professional involvement in your local section?	Yes/No	
4.1	Demographic	How many TOTAL members does the section currently have?	Open Ended	Lagging
4.2	Demographic	What percent of total members are LOCAL section members ONLY?	0-100%	Lagging
4.3	Demographic	What percent of the section's board of directors/executive committee is less than 35 yrs of age?	0-100%	Lagging
5.1	General	Please describe the current and future state of your local section. Feel free to provide more details on any of the above responses	Open Ended (insight)	
6.1	Demographic	Within each section's geographic area, what percent did AIChE memberships (not local section memberships) change between 2015 and 2016?	-100-100%	Lagging
6.2	Demographic	What percent did local section membership change in the last year (2015 vs. 2016)?	-100-100%	Lagging

January 2017

#### 2.2.1 Organization

- Questions 1.1 through 1.6 all deal with the performance of a section's organizational structure. This set of questions is characterized as a leading metric since they are indicative of a section's capacity for operating smoothly.
- Questions that involve a 'Yes' or 'No' answer are scored as calculated in Equation 1 where Q is the question response and S is the final question score. "Yes" is evaluated as 1 and "No" is evaluated as 0, which give the two possible scores of 0.5 and 0. Equation 1 is used for questions 1.1, 1.4, and 1.5

$$S = 0.5(1 - Q) \tag{1}$$

Questions that involve a numerical answer are 1.2, 1.3, and 1.6. The scores are calculated as shown in Equations 2 through 4, where Q is the question response, and S is the final question score. The max term represents the maximum of all section responses.

$$S_{1.2} = \left(1 - \frac{Q_{1.2}}{100}\right) \tag{2}$$

$$S_{1.2} = \left(1 - \frac{Q_{1.2}}{100}\right)$$

$$S_{1.3} = \left(1 - \frac{Q_{1.3}}{\max(Q_{1.3})}\right)$$
(2)

$$S_{1.6} = 0.5 \left( \frac{Q_{1.6}}{100} \right) \tag{4}$$

The score range for questions 1.2 and 1.3 is 0 to 1, and the score range for 1.1, 1.4, 1.5, and 1.6 is 0 to 0.5. A higher score is indicative of a section that is functioning efficiently and is improving and a lower score indicates a section that is struggling with this metric.

#### 2.2.2 Media

- Questions 2.1 through 2.3 deal with media activities and active presence.
- All responses in this section are "Yes" (1) or "No" (0) answers and will be awarded a score of 0 or 0.5 according to Equation 1.
- This is a leading metric because a low score is indicative of a section that is weak in this area and a higher score is indicative of a section that is active in their outreach effort

#### 2.2.3 Involvement

- Questions 3.1 through 3.3 depict a local section's participation in community and AIChE activities. Question 3.4 responses are not analyzed since it is only used as a formal request for assistance from LSC with regards to YP involvement.
- Question 3.1 was left in the survey in error as an artefact from previous surveys. There has not been a Local Section Leadership Workshop offered in two years so the measuring attendance as a leading metric is impractical.
- All responses in this section are "Yes" (1) or "No" (0) answers and will be awarded a score of 0 or 0.5 according to Equation 1.
- This is a leading metric because a low score is indicative of a section that is struggling with engaging niche groups and its visibility with AIChE's home office, and a high score is indicative of a section that handles these tasks well.

**Local Sections Committee** 

January 2017

#### 2.2.4 Demographics

- Questions 4.1, 4.2, 4.3, 6.1, and 6.2 deal with the demographics of the local sections and is a major lagging metric. Since a lagging metric MUST meet the above definition, scoring of these questions needs to be handled differently.
- 4.1 is open ended, but the number of members is first used to determine what the TOTAL members belong to that section. Next, the percent for a given section is compared to the maximum percent among all sections. Equation 5 shows the calculation of the Question 4.1 score. The *max* term represents the maximum of all section responses. Similarly, the *sum* term is the sum of all section responses.

$$S_{4.1} = \max\left(\frac{Q_{4.1}}{sum(Q_{4.1})}\right) - \frac{Q_{4.1}}{sum(Q_{4.1})}$$
 (5)

For example, in a survey size of two sections having 5 and 10 members, the proportions belonging to each section are 0.33 and 0.67 respectively. The final metric score will be 0.67-0.33 = 0.34 and 0.67-0.67=0. This indicates that section A has a higher lagging metric than B. The minimum score is zero and the maximum theoretical score is 1.

• Questions 4.2 and 4.3 are scored using the same rationale. Based on the percent entered, each section receives a score between 0 and 1 that is found as follows: (1-proportion entered). This method of scoring will ensure that sections exhibiting low numbers will receive higher lagging metric scores. Question 4.2 is scored according to Equation 6 based on the proportion between responses to 4.2 and 4.1 if the section responded with a whole number instead of a percentage. Otherwise, the 4.2 to 4.1 proportion is replaced by the actual percentage response in Equation 6. The score for question 4.3 is calculated in Equation 7.

$$S_{4.2} = \left(1 - \frac{Q_{4.2}}{Q_{4.1}}\right) \tag{6}$$

$$S = \left(1 - \frac{Q}{100}\right) \tag{7}$$

• Questions 6.1 and 6.2 are scored slightly differently in order to accommodate negative numbers. The calculation is done exactly as in question 4.3 using Equation 7, but a section can be awarded a lagging score of greater than 1. This method is very helpful because it immediately indicates when a section has lost members (score greater than 1). For example, a section loses 30% of its members then the lagging metric will be (1-(-0.3) or 1.3. If the section gains 15%, then the lagging metric will be (1-0.15) or .85. The more members a section gains the lower a lagging factor will be.

#### 2.2.5 Overall Metric Calculation

The leading metric for a section is calculated shown in Equation 8, where Q is the survey response for a question. The overall metric score is the sum of all question scores, which are explained in 2.2.1 through 2.2.5. Higher leading metrics are signs of health. The *max* term represents the maximum of all section responses.

$$Leading = 0.5(1 - Q_{1.1}) + \left(1 - \frac{Q_{1.2}}{100}\right) + \left(1 - \frac{Q_{1.3}}{\max(Q_{1.3})}\right) + 0.5(1 - Q_{1.4}) + 0.5(1 - Q_{1.5}) + 0.5\left(\frac{Q_{1.6}}{100}\right) + 0.5(1 - Q_{2.1}) + 0.5(1 - Q_{2.2}) + 0.5(1 - Q_{2.3}) + 0.5(1 - Q_{3.1}) + 0.5(1 - Q_{3.2}) + 0.5(1 - Q_{3.3})$$

$$(8)$$

January 2017

The lagging metric for a section is calculated shown in Equation 9, where Q is the survey response for a question. The overall metric score is the sum of all question scores. The *max* term represents the maximum of all section responses. Similarly, the *sum* term is the sum of all section responses. Higher lagging metrics are signs of low health.

$$Lagging = \max\left(\frac{Q_{4.1}}{sum(Q_{4.1})}\right) - \frac{Q_{4.1}}{sum(Q_{4.1})} + \left(1 - \frac{Q_{4.2}}{Q_{4.1}}\right) + \left(1 - \frac{Q_{4.3}}{100}\right) + \left(1 - \frac{Q_{6.1}}{100}\right) + \left(1 - \frac{Q_{6.2}}{100}\right)$$

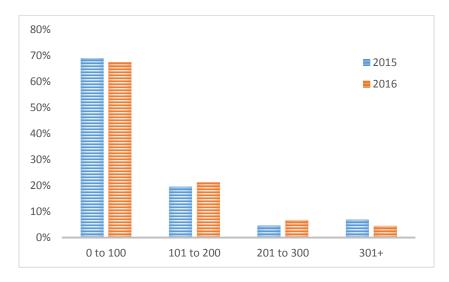
$$(9)$$

### 3 Results and Discussion

#### 3.1 Overview of Local Sections

In 2016, there were 89 local sections, which is a net decrease of 3 sections from 2015. Four sections were closed and one formerly inactive section reopened. The Local Sections Committee made an effort in 2016 to reduce long-term inactive sections on the master list that were not removed in previous years. In order to begin the analysis of the data, local sections were grouped based on their sizes; the reason being that it would be statistically unfair to compare the performance of a large section that has more resources and funding, to that of a smaller section that may be facing budgetary and organizational constraints. Breaking down the sections based on their size also makes it easier to make recommendations for improvement.

Based on pre-determined size classes, the sections were broken down into Small (<100 members), Medium (101-200), Large (201-300) and X-Large (>300) sections. The size allocation and section distribution of these groups can be seen in Figure 1. Most local sections have fewer than 50 members. The distribution of membership size has trended upwards over the past year. Less sections have 0 to 100 members, and the number of sections with 101 or more members increased.



January 2017

#### Figure 1. Percent of all local sections by membership size.

Local section health depends on the health of the geographic region it covers, including local industries and major companies. Figure 2 shows the central locations of each local section across the United States. International sections that are not pictured include: Monterrey, Mexico; Alexandria, Egypt; Dhahran, Saudi Arabia; and Singapore. The pins are color coded according to section size. There is a high concentration of local sections on the east coast, likely due to the high success of pharmaceutical industries in that area. Larger sections can be seen on the gulf coast where many oil and gas companies operate.

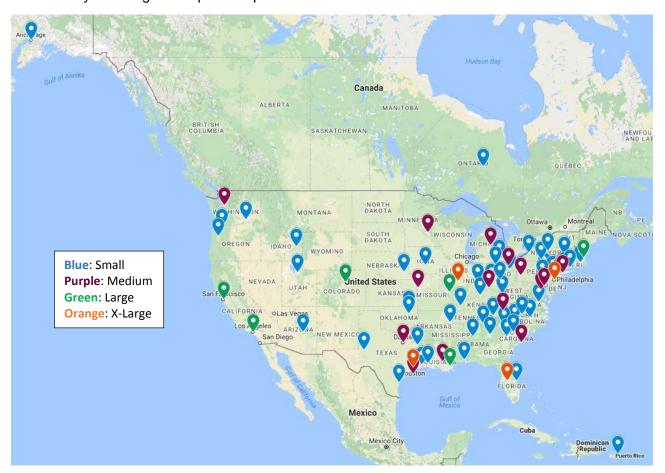


Figure 2. Geographic location of local sections in the Americas designated by section size.

### 3.2 Survey Participation

The survey resulted in 69% of sections responding in 2016, a five percent drop from 2015. This is worth mentioning because in order for AIChE to make effective recommendations and effect changes, it must be aware of the health of as many local sections as possible. The entire decrease in participation cannot be attributed to section attrition. While there was a net loss of three sections, there were still seven fewer sections that participated in the annual survey this year. The complexity and length of the survey as compared to previous versions remained the same, so



January 2017

there may be an opportunity to improve the Annual Report and feedback provided to the sections on their individual results. An increase in effectiveness could increase the response rate. Those sections who have not participated the last few years will be contacted in hopes of improving participation numbers for 2017.



### 3.3 General Findings

#### 3.3.1 Leading and Lagging Metric Comparison

Based on the size distributions of the sections, the leading and lagging metric of all sections were determined using the aforementioned criteria. The average leading and lagging metrics for each of the four groups can be seen in Figure 3. Standard deviations of the metrics are included in order to highlight the variance in the responses. Predictably, small sections have the lowest leading metric and extra-large sections have the highest. Higher membership numbers may lead to better resources for higher performance. However, the large sections had a lower average leading metric than both the extra-large and the medium sections. The leading metric standard deviations are very wide showing that there was high variance the responses from the sections within each group. This will be further explored in the breakdown by section size in 3.3.2. The average lagging metric is about the same for small, medium, and large sections with tight standard deviations, which means that they are similarly weighed down. The extra-large sections have a lower average lagging metric representing less barriers to a healthy section.

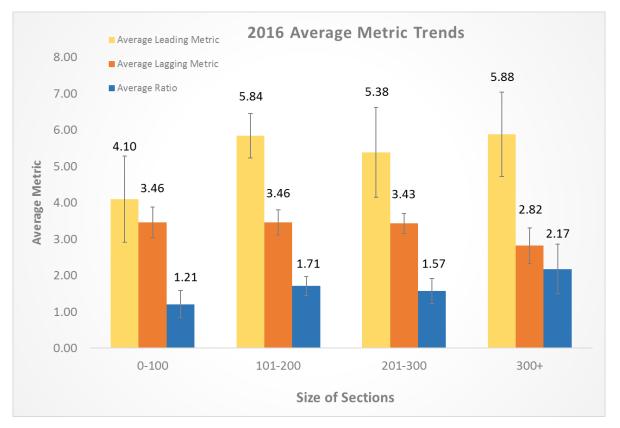


Figure 3. Average metric for each of the four size groups

Sections that have the average leading metric score or higher, especially if outside the standard deviation shown in Figure 3, have good indications of continuing health. Sections that have scores lower than the average lagging metric for their group, especially if outside the standard deviation, have good indication of low barriers to success. These sections should keep current practices.



January 2017

Small sections should look for leading scores above 4.10, medium sections above 5.84, large sections above 5.38, and extra-large sections above 5.88. Lagging metrics should be below 3.46 for small sections, medium sections below 3.46, large sections below 3.43, and extra-large sections below 2.82.

Sections that have leading metric scores lower than the average, especially if outside the standard deviation depicted in Figure 3, have indications that there is room to improve. Sections that have lagging metric scores lower than average, especially if outside the standard deviation, have indications that the health of the section may be suffering currently or in the near future as compared to peers. These sections should focus on improvement in 2017 to prevent declining success. Small sections should look at lagging scores above 3.46, medium sections above 3.46, large sections above 3.43, and extra-large sections above 2.82. Leading metrics below 4.10 for small sections, below 5.84 for medium sections, below 5.38 for large sections, and below 5.88 for extra-large sections are of concern.

LSC has identified focus areas of organization, involvement, and media for leading metric measurement and demographics for lagging metric measurement. Sections should reference 2.2.1 through 2.2.4 for how these focus areas are measured for each survey question to help guide efforts to improve. Equations are provided to the sections in 2.2.1 through 2.2.5 to monitor current health and help assess various ideas. Specific recommendations for sections seeking to improve can be found in 3.5.1 through 3.5.4 broken down by focus areas and individual questions.

### 3.3.2 Breakdown by Section Size

Figures 4 through 7 depict the leading and lagging metric values for each section compared to peers of the same section size and the average leading and lagging metrics of those sized sections. The leading metric for small and large sized sections varied widely. Medium sections have more similar responses, and extra-large sections had a few outliers. This shows that the strengths of the sections are very unique to each. LSC is willing and able to support individual sections' needs as required.

Lagging metrics were tightly grouped across all size groups, with slightly higher deviation in small and extra-large sections. This trend continues from past years, which shows that all of the sections are weighed down similarly. Improvements implemented by the LSC to improve lagging metrics could help all sections across the board. The outliers identified in the small and extra-large groups will be contacted outside of LSC main efforts to provide section-specific assistance. The change in average lagging metric over the years can be used to determine the effectiveness of any implementations if standard deviations remain low. Comparison to past results of effectiveness of LSC improvements are discussed in 3.5.



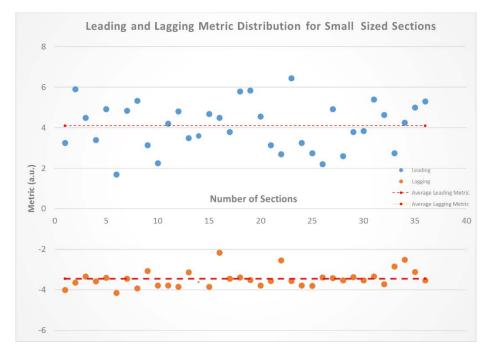


Figure 4. Leading and lagging metric distribution for small sized sections.



Figure 5. Leading and lagging metric distribution for medium sized sections.



Figure 6. Leading and lagging metric distribution for large sized sections.

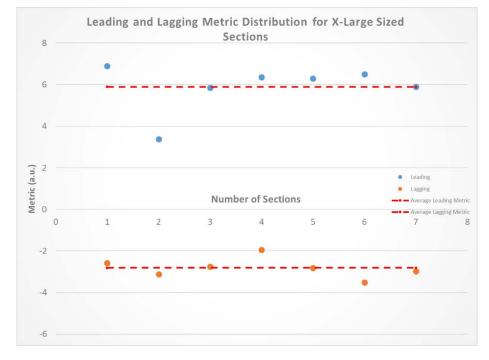


Figure 7. Leading and lagging metric distribution for extra-large sized sections.



January 2017

#### 3.4 Open-ended Questions

The responses to the open-ended question 5.1 was also analyzed to gain a general understanding of the health of local sections. The following themes were noted as the most prevalent:

- The section is stable
- The section is inactive/stagnant and/or planning to close
- The section does student chapter outreach/activities/scholarships
- The section has active young professionals in leadership roles and/or attending meetings
- The section needs more volunteers to plan events or fill officer roles

The full responses are included in Appendix A with identifying phrases removed. There was about an equal mix of positive and negative in the prevalent themes. This demonstrates how wide ranging the needs of the AIChE local sections are. Review of these comments is suggested for sections looking to improve their health since many helpful ideas were described by local section leaders of healthy sections.

#### 3.5 Comparison to Past Results

The 2016 year generally showed an improvement for all current AIChE local sections. Across the board, sections of each size saw lower lagging metrics indicating that historic concerns have been addressed and mitigated, reducing difficulties faced by local sections.. This continued the trend from 2015 which suggests that LS efforts have been improving the health of sections. Small, medium and extra-large local sections all saw slightly improved leading metrics in 2016 showing that there are more positive things happening within local sections to support their overall health. The ratio of leading to lagging metrics improved between 2014 and 2016 for sections of all sizes meaning better health of local sections in 2016. Figures 8 through 11 show the metric comparisons for 2014 through 2016 for local sections of each membership size.



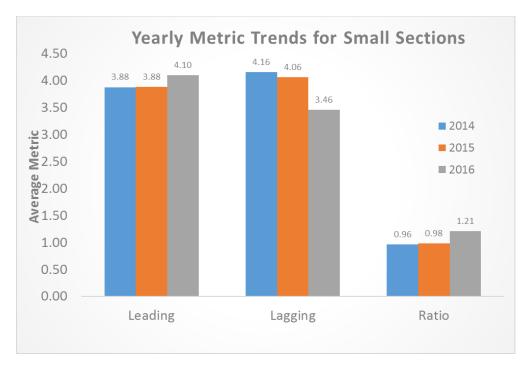


Figure 8: Annual metric trends for small local sections

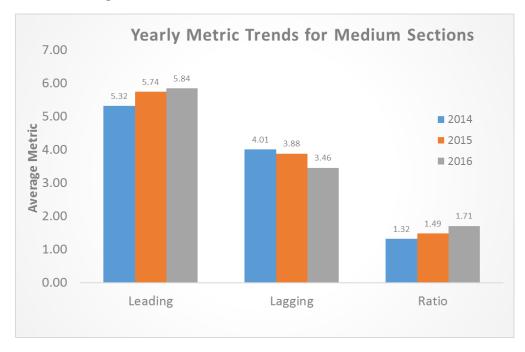


Figure 9: Annual metric trends for medium local sections



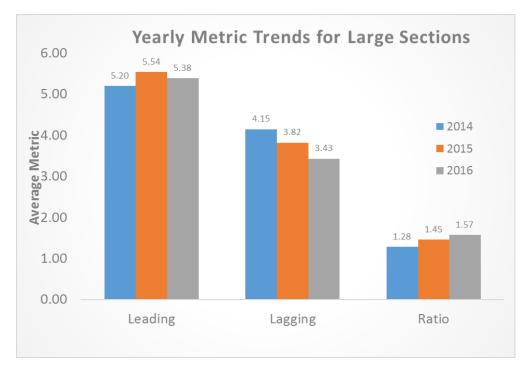


Figure 10: Annual metric trends for large local sections

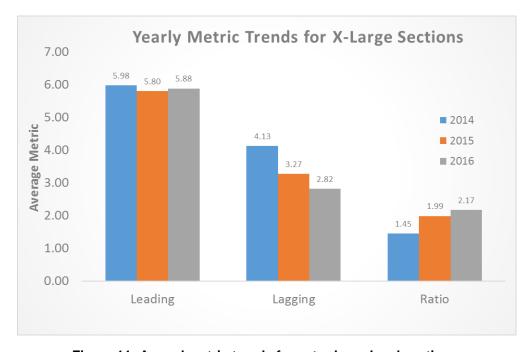


Figure 11: Annual metric trends for extra-large local sections.

Figures 12 through 15 show the breakdown of metrics by question between 2014 and 2016 for local sections of each size. Each set of questions correspond to a specific focus area: organization, media, involvement, and demographics. Discussion at this level of detail allows the LSC to determine specific focus areas for improvement.

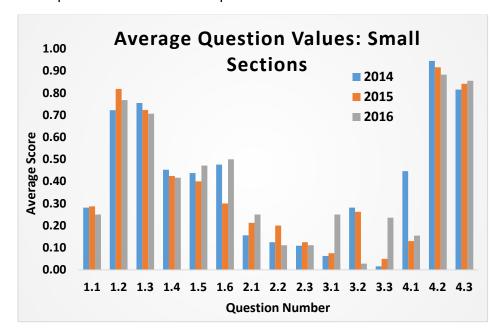


Figure 12. Average score for each annual survey question for small sections.

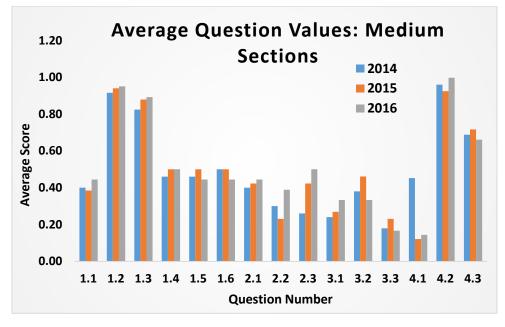


Figure 13. Average score for each annual survey question for medium sections.



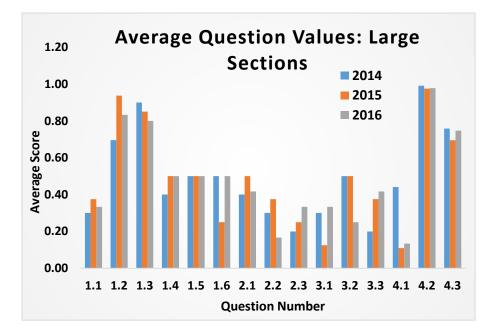


Figure 14. Average score for each annual survey question for large sections.

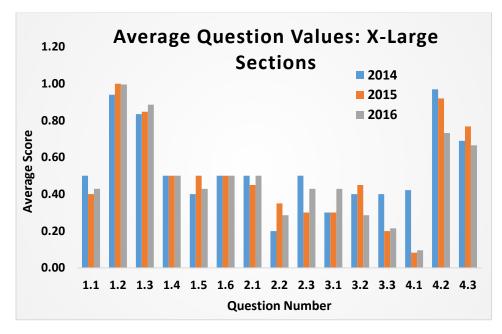


Figure 15. Average score for each annual survey question for extra-large sections.



January 2017

#### 3.5.1 Discussion of Organization Metrics and Recommendations

Questions 1.1 through 1.6 focused on organizational function, all of which measured leading metrics. The performance of the organizational structure highly affects the health of the section. Strong leadership sets the section up for success, and active, fresh leaders involved with the AIChE community receive higher scores. Lower scores show that sections are struggling, and higher scores shows sections are running smoothly.

Question 1.1 covered officer elections within the past year and awarded a score of 0.5 for "yes" and 0 for "no." The average score for small sections was 0.25, meaning about half the sections held elections. This score has been trending down since 2014. Large sections have also seen a decrease in elections versus 2015. Medium and extra-large sections are more successful at holding elections with average scores of 0.4 and 0.43, respectively. Both size groups have shown improvement over 2015. Sections with a score of 0 should consider opportunities for improvement.

Question 1.2 surveyed the percent of positions on the leadership team that were not filled. A higher percentage results in a lower score, with a maximum score of 1 for a response of 0% unfilled positions. Small and large sections have seen a decrease in this score since 2014, showing more vacant positions among section leadership. Medium and extra-large saw an increase in the average score as more positions are being filled. Sections with a below average score according to Figures 11 through 14 should seek to improve fulfillment of officer positions.

Question 1.3 examined the number of officers repeating terms through the average repeat rate. More officers repeating terms results in a lower score. A section's response is compared to the maximum of all responses, with the highest response resulting in the lowest score. Medium, large, and extra-large sections are all generally capable of getting fresh volunteers for leadership with average scores of 0.89, 0.8, and 0.88 respectively. Medium and extra-large sections have improved this score since 2014. Large and small sections have been seeing a decrease in this score since 2014. Small sections are the weakest at this aspect with an average score of 0.71. Sections with a below average score, especially if far from the center, should try to improve turnover in leadership positions.

Sections seeking improvement on one or more of Questions 1.1 through 1.3 should make efforts to hold officer elections consistently according to a set procedure and annual timeline. This should lower the risk of unsuccessful elections. Lack of elections may be tied to low membership numbers or lack of involvement. The LSC has prepared example by-laws for sections that includes information about elections, available on the Resources for Local Section Leaders website. There is also a list of officer positions and suggested responsibilities. Individuals in a leadership position should take the initiative to find a candidate for their own replacement or opposition for the next election. The leaders know their role best and are the most capable of identifying good candidates. In order to fill long vacant positions, candidates may need to include members who are not very involved with the section or non-members that are encouraged to join. AIChE Engage is a great way to get in contact with members in the region that are not local members. Personal and online networking can assist with finding other professionals who are not in the AIChE listings.



January 2017

Questions 1.4 through 1.6 deal with actions that the leadership of a section take, especially the communication with the LSC. Question 1.4 asks if the section has filed an annual report within the past two years. This is different from the annual treasurer's report in Question 1.5. The maximum score for 1.4 is 0.5, which was the average for medium, large, and extra-large sections. All responding sections of these sizes completed an annual report within the past two years. This is important to the LSC in order to determine how best to assist the local sections. The small sections still averaged a high score at 0.42, but this means that some sections in this category are not filing an annual report. Sections with a score of 0 (did not file an annual report within two years) are encouraged to participate in the reporting. If assistance is needed in answering questions, sections are encouraged to contact the LSC leadership who can provide one-on-one support.

Question 1.5 for annual treasurer's report submission had high average scores as well. However, only the large sections averaged a perfect score of 0.5. All of the sections in this size group submitted a treasurer's report. Small, medium, and extra-large sections had average scores slightly below the maximum, so only some sections did not file a report. Sections with a score of zero (did not file a treasurer's report within the last year) should consider what will help them file a report in the future. The LSC recommends sections get their entire leadership team to assist with the report to make sure that all necessary information is available to the treasurer. Sections should be proactive whenever the first call for responses is requested so that issues with information are discovered early and are able to be solved. Treasurers and other officers are encouraged to contact the LSC with any difficulties encountered when filling out the annual report.

The percent of monthly LSC calls attended is captured in question 1.6. The maximum score is 0.5 for a response of 100% attendance. Small, large, and extra-large sections averaged the maximum score, so each section was present at every monthly LSC call. Medium sections had a slightly lower average score at 0.44 meaning some calls were missed. Calls were held bi-monthly instead of monthly. Sections should continue to call into the bi-monthly meeting. Sections who struggle with this or scored 0 on question 1.6 are advised to use their entire leadership team to plan attendance advance to ensure coverage.

In addition to the bi-monthly calls, the LSC offers sections an opportunity to communicate directly to the committee as well as fellow section leaders. The LSC twice a year sends out teleconference invites based on size and geography to section leaders. These regional calls are for section leaders to discuss issues or successes of their section and get advice or support from the committee, staff, and their peers. In addition, AIChE has just launched a new online community on AIChE Engage, Local Section Leaders Central, just for section leaders to use to reach out to other section leaders for support or advice.

#### 3.5.2 Discussion of Media Metrics and Recommendations

Questions 2.1 through 2.3 focused on media usage, all of which measured leading metrics. Effective use of media increases the outreach to new and existing members and could help boost involvement through improved accessibility of information. Sections that have an active presence receive high scores, and lower scores show sections that are weak in this area.



January 2017

Question 2.1 records whether a section has a webpage or not. The maximum score is 0.5 for sections that have webpages, and 0 is the score for sections that do not. The average score for extra-large sections was 0.5, so all sections in this size group maintain websites. Large sections mostly have websites, but the number has decreased since 2015 with an average score of 0.42. Medium and small sections have increased their web presence since 2014 with scores of 0.44 and 0.25 respectively. Small sections are the least likely to have websites. Sections who scored 0 on Question 2.1 are encouraged to create a website. AIChE offers free web hosting to all sections. The design and interface are extremely simplified and little technical knowledge is necessary to set up and maintain a section website. Sections can find a guide to entity websites on the AIChE website where they can also request a web page for their local section.

Question 2.2 asks whether a section has published a newsletter in the past year. Newsletters show regular communication between section leadership and membership. A score of 0.5 represents a "yes" response, and 0 is the score for a response of "no." Medium sections are being the most successful at releasing newsletters with a score of 0.38, which has been increasing since 2014. Extra-large sections were slightly lower performing at an average score of 0.29. Small and large sections had the lowest number of sections publishing newsletters with average scores of 0.11 and 0.17. Both sections saw a decrease in average score since 2014. Sections with a score of 0 on this question should examine section practices around newsletters. If there is no current program for creating newsletters, sections are advised to develop a plan. Newsletters are often available on local section websites and can be viewed as an example of how to structure one. No LSC resource is available at this time for creating newsletters. Sections that have a newsletter program but are struggling are recommended to create an editor position separate from the rest of the leadership team to reduce workload. It may also be helpful to have a newsletter committee with reporters whose sole responsibility is to create content for the newsletter periodically.

Question 2.3 covers social media presence, including active advertisement, communication, and event information. This is again a way of keeping in touch with current members or reaching out to new members to grow in size. Medium sections were the best at maintaining an active social media presence in 2016 with an average score of 0.5. This was a large increase from 2014 when there was an average score of 0.26, doubling the sections that say they are on social media. Large and extra-large sections have average scores of 0.33 and 0.43, respectively, with the large section showing improvement since 2014. Small sections had the lowest average score at 0.11, and there has been little change over 2014. Sections that scored 0 on this question are encouraged to begin a social media presence on Facebook, LinkedIn, or another site. Having a dedicated volunteer working on online communication can be helpful, and this position does not have to be an officer. Sections may also find useful ideas on how to utilize social media in the open-ended responses listed in Appendix A by searching for "Facebook" or "LinkedIn."

#### 3.5.3 Discussion of Involvement Metrics and Recommendations

Questions 3.1 through 3.3 focused on involvement, all of which measured leading metrics. The three questions address specific groups and their involvement. Sections with low scores are struggling to engage niche groups and will also have less visibility and opportunity for improvement from the AIChE home office. Sections with high scores handle these tasks well.



January 2017

Question 3.1 was about Local Section Leadership Workshop (LSLW) attendance within the last two years. Trained leadership gives sections more tools for success, and it also helps with visibility within the LSC and AIChE home office. The workshop brings leaders together to network and share ideas and concerns. However, there has not been an LSLW in the past two years. This question was meant to be eliminated from the survey but was left on in error. The minimum and maximum scores for the question were 0 and 0.5 representing answers of "no" and "yes" to having an officer attend an LSLW in the past two years. All sections improved their average scores over the past two years, and most were greatly improved since 2015. The scores for this questions actually should have gone down since sections were not provided with an opportunity to attend an LSLW. There is a possibility that sections are confusing LSLW with the new volunteer leadership training program offered at the 2015 Annual Meeting. This question needs to be updated to better reflect current practices, since measuring the trained leadership involved in each section is still a major contributor to section health.

Involvement with the local student chapter is covered in question 3.2. Regular activities with student chapters can help ease the transition into professional local sections and increase membership. A score of 0 represents a response of "no involvement in the past year" and a score of 0.5 represents some involvement with a local student chapter in 2016. All sections saw a decrease in involvement in the past two years. Small sections had the lowest average score at 0.028. Very few small sections had activities with student chapters in 2016 compared to an average score of 0.26 in 2014. Medium, large, and extra-large sections had about the same performance as shown by average scores of 0.33, 0.25, and 0.29 respectively. Sections with a score of 0 on this question should consider developing a relationship with a local student chapter. A list of student chapters is available on the AIChE website along with current section leadership to contact. Professional panels or an open invitation to a social program including Young Professional events are a good way to work with student chapters. Some sections may not have a close student chapter or one that is inconvenient to the major industrial area in the covered geographic region. These sections should consider virtual meetings, webinars, or reaching out to local K-12 schools. Local community colleges and trade schools can also be a good source of regional involvement.

Question 3.3 asks whether a section has a Young Professional group. A score of 0 is "no" and 0.5 is "yes." A group that specifically addresses young professionals is helpful when getting chemical engineers under the age of 35 involved in the section. Large sections are the most successful at YP groups as evidenced by an average score of 0.42. Small, medium, and extra-large sections are less likely to have Young professional groups, averaging scores of 0.24, 0.17, and 0.21 respectively. In the cases of small sections and some medium sections, young professional involvement is probably more concentrated within the executive board of the section than with a separate group, which can be just as effective (see section 3.5.4). Sections with a score of 0 on this question are encouraged to consult the guide <a href="Starting a YP Group Within a Section">Starting a YP Group Within a Section</a> available as a part of the Resources for Local Section Leaders on the AIChE website. There are also several examples of successful YP programs and involvement in the open-ended responses in Appendix A.



January 2017

#### 3.5.4 Discussion of Demographics Metrics and Recommendations

Questions 4.1 through 6.2 address the demographics of the local sections and are measured as lagging metrics. Local section leaders are asked for their input on question 4.1 through 4.3 regarding section membership numbers and Young Professionals involved in leadership. Questions 6.1 and 6.2 are determined through AIChE records instead of survey responses. High scores on these questions signal a declining section with lower membership numbers and older leadership teams. Lower scores are achieved by healthier sections.

Question 4.1 asks for the total section membership. Scores are assigned as a proportion of the total membership across all sections. The minimum score for this question is 0 for the section with the highest proportion of members, and the theoretical maximum score is 1 for sections with 0 members. The expected distribution is small sections having the highest average and extra-large sections having the lowest average by definition. This is evidenced by the small section average score of 0.16, medium section 0.14, large, 0.13, and extra-large 0.09. The preference over time is to have all sections with the same high membership size. Increasing averages in smaller sections coinciding with decreasing averages in larger sections would be concerning because it would signal an imbalance in the member distribution. Compared to 2015, this is close to the trend that is seen. Small, medium, and large sections increased their average scores, while extra-large sections stayed about the same. This likely means that some of the larger sections in the small, medium, and large sections saw a decrease in membership, which would increase the average score for this question. It was noted that the membership numbers reported in the survey often differed from official AIChE records of section membership. Based on the open-ended question responses, this is likely due to different definitions and categories of membership. Leaders listed numbers for active members versus inactive members. Distribution lists were also frequently mentioned and differed from official records. Local section leaders can always access their AIChE-maintained section membership lists online.

The percent of members that are local-only is addressed in Question 4.2. Higher involvement at the local-only level is rewarded with a low lagging score on this question. The LSC wants more people to be engaged with local sections even if they are not paying AlChE dues. Small and extralarge sections saw a decrease in this average score since 2014 at 0.88 and 0.73 respectively, which means there are more members involved in these sections only at the local level. Medium and large sections had the highest average scores on this question with 0.997 and 0.98 respectively. A very high proportion of members within these sections are AlChE dues paying members. For medium sections, it is nearly a perfect score of 1 representing 100% AlChE dues paid by members.

Sections with above average scores on questions 4.1 and 4.2 should focus on efforts to increase membership numbers. Many of the aforementioned suggestions for other questions will also help with membership. The LSC has compiled a <u>guide to help with recruitment</u> available on the AIChE website, and is recommended to sections high scores on these questions. When a section has more activity and there is more incentive to be a full member, local-only membership should decrease. Sections struggling with maintaining AIChE dues-paying members could consider giving special benefits such as reduced-cost activities to those who are full members.



January 2017

Question 4.3 covers the age of local section leadership. Lower percentages of leadership under 35 years old results in a higher lagging score. Maximum score is 1 for a response of 0% young leadership and minimum score is 0 for 100% young leadership, with healthier sections having a higher proportion of officers under 35. Small and large sections have seen an increase in average scores to 0.86 and 0.75 showing an older leadership team. Medium and large sections had about the same average score at 0.66 and 0.67, respectively, which is a decrease from 2015. Sections scoring below the average for their size group on this question are doing well with involving younger engineers in the section leadership. Sections scoring above the average should work on encouraging young professionals to run for officer positions. Improving or starting a Young Professional group could improve this score, and the guide Starting a YP Group Within a Section is available as a part of the Resources for Local Section Leaders on the AIChE website.

Question 5.1 was the open-ended question which was previously addressed in section 3.4 of the report. Questions 6.1 and 6.2 are scored based on official AIChE records and no input from section leaders was used. The questions looked at percent change in membership over the year in the geographic area and the local section specifically. No score breakdown is provided for these questions.

#### 3.6 Conclusions

Major conclusions from 2016 Annual Survey results and analysis are:

- Survey response rate decreased 5% from 2015 with the same set of questions, so there is an opportunity to improve the annual report and feedback provided to sections.
- Higher membership numbers lead to better resources and higher performance
- High variance in leading metrics show wide variety of benefits and successes in each section, which must be addressed or enhanced individually.
- Low variance in lagging metrics show they are similarly weighed down and can be addressed across the board.
- Extra-large sections have a much lower average lagging metrics than other section sizes representing less barriers to a healthy section.
- Lower lagging metrics in 2016 indicating fewer things to be concerned about within a section. LSC efforts have been improving health of sections.
- Slightly improved leading metrics showing more positive things happening within sections.
- Small sections much weaker at getting fresh volunteers for leadership and low repetition of officers.
- All responding medium, large, and extra-large sections have completed an annual report in the past two years.
- Small, large, and extra-large sections that responded to the survey attended every monthly LSC call.
- Small sections are the least likely to have websites
- All sections saw a decrease in student chapter activities since 2014.
- Large sections are much more likely to have a YP group than other sized sections.

Three major conclusions from 2014 and 2015 are also still valid:



January 2017

- 1) The lagging metrics are INDEPENDENT of the size of the section, meaning the metric is not affected by the size of the section.
- 2) The leading metrics are DEPENDENT of the size of section meaning these metrics change as the size of a section changes.
- 3) Based on (1) and (2), it logically follows then that the ratio of the leading/lagging metrics are DEPENDENT of the size of a section with larger sections exhibiting better overall health.

These major conclusions are a good indication that lagging metrics can be addressed more broadly across all sections while leading metrics should be addressed based on the section's size. This means the committee and AIChE should create broad programs open to all sections based on lagging metrics while at the same time create specific programs based on section size on leading metrics. In addition, it appears that a top down approach works best for lagging metrics while the opposite would be true for leading metrics. Meaning that AIChE and the committee should be more aggressive in improving the lagging metrics either by programs, grants, resources, or improved communication with local sections while local section leadership should be more aggressive in addressing the leading metrics in much the same way with their local members.

It should be mentioned that new local sections will have higher lagging metrics as they get themselves off the ground. If this is your section's first few years of existence, consider this year's metrics as a benchmark to continually improve upon.

As more data is gathered from repeating this survey, better conclusions could be drawn from this type of analysis. Higher overall leading metrics and lower lagging metrics demonstrates an improvement in local sections. LSC efforts over the past year have had a positive effect on the success of all the sections. However, this conclusion could be undermined by the decrease in response rate. If underperforming sections are failing to respond this could artificially boost metrics and hide weaknesses.

### 4 2016 Recommendations

Based on the 2015 survey results, the AIChE Local Section Committee structured its services to the different types of sections to better cater to their specific needs and concerns. In particular, LSC acted on the recommendation that the Committee continue to update and revise the documentation for local leaders on the <a href="Resources for Local Section Leaders webpage">Resources for Local Section Leaders webpage</a> from 2014 and continue to align volunteers for this task completion.

Similar to 2014 survey results, direct follow up with local sections with lagging overall metrics is recommended to determine the support needs of the section on an individual basis. Additional action items obtained from 2016 survey can be listed as:

1. LSC should focus more heavily on small and medium sized sections. Current considerations include more frequent calls for small and medium sections for idea-sharing, but specific initiatives will be developed early in 2017.



January 2017

- 2. It is likely that local industrial activity changes may be affecting the growth and operation of all sections. It is recommended to correlate these factors to economic data and/or Institute's membership analyses.
- 3. Update question 3.1 regarding the Local Section Leadership Workshop to reflect more general leadership development training offered by AIChE.
- 4. Update question 1.6 to reflect changing the frequency of LSC meetings from monthly to bimonthly.
- 5. Improve individual feedback to sections by providing specific suggestions based on that section's unique responses.
- 6. Improve entry of section name in survey to have consistent convention by using a drop down menu instead of a text field.
- 7. Develop a resource guide for sections looking to start or improve their newsletter program.

### 5 Looking Forward

In order for the Annual Report to be effective and beneficial in accomplishing the goal of making AIChE a data-driven organization, continued data collection must be made priority. Diligent data collection and analyses will ensure that the leading and lagging metrics can indeed be used to predict the bottom/peak of a local section and that the AIChE Local Sections Committee can render assistance as and when necessary. In order for this survey exercise to embody the meaning of leading and lagging metrics as proposed by the BRTFLS, sustained responses from local sections are expected. The committee and AIChE staff will reach out to repeatedly unresponsive sections to help improve the number of sections completing the survey. The committee should also administer a follow-up survey to all sections in order to gather feedback on the effectiveness and helpfulness of the Local Section Annual Report.

In the coming years, the committee should judge how effective its programs and resources are for local sections based on the general lagging trends of all sections while section leaders should focus more on their leading metrics to see how effective their own local programs have been improving the participation of local members.

Each local section may use the leading and lagging metrics in order to measure the success of new and current initiatives over the years. The equations provided for how the metrics are calculated should assist local section leaders in determining progress throughout the year or predict effect of certain programs on the overall health of the section.



**Local Sections Committee** 

January 2017

### 6 Acknowledgements

The Local Sections Committee would like to thank the following people who dedicated more than a year of their time reviewing the local sections program and creating thoughtful recommendations to help improve the program as a whole. These recommendations were brought to the AIChE Board of Directors for consideration at the 2014 AIChE Spring Meeting. Many of these recommendations, including updating the Local Sections Annual Report, were approved.

#### Members of the 2014 AIChE President's Blue Ribbon Task Force on Local Sections

Freeman Self, Chair

Otis Shelton, 2014 AIChE President, Sponsor

Phil Westmoreland, 2013 AIChE President, Sponsor

Bette Lawler, Sponsor

Dan Lambert, Sponsor

Barbara McDonald Loe, AIChE Staff

Monica Mellinger, AIChE Staff

Brian Daly, Vice Chair (Local Sections Committee Chair)

Joseph Smith

Lane Daley

Matt Kolodney

Anthony Fregosi, CEOC

Mark Stadtherr, CTOC-Vice Chair

Defne Kavrak Talav, SIOC

Joe Deneault

Janet Werner

The Local Sections Committee would also like to thank the following people for the time and dedication spent towards strategizing the 2016 Local Sections Annual Report, analyzing the data, and publishing the final results in this written format.

#### Annual Report Subcommittee of the Local Sections Committee

Andi Huffman, East Tennessee Local Section

Rishon Benjamin, Delaware Valley Local Section

Brian Daly, Local Sections Committee Past Chair

Sidney Biddle, Local Sections Committee Chair, Delaware Valley Local Section

Owen Jappen, Local Sections Committee Vice-Chair

Thank you all for your commitment to AIChE and improving its local sections program!



January 2017

### **Appendix A**

Full Responses to Open-ended Question 5.1 on 2016 Annual Survey

We have been trying to engage more people within the community to try and get more volunteers. We are committed to maintaining the [Section] but struggle due to declining number of chemical engineers in the area and heavy commitment of these engineers to other volunteer activities.

[The Section is] a small section (57 members, 7 currently delinquent) located in 7 counties in [the area]. We have an aging membership and we are working to keep our section going. We do not have any student chapters in our area. We have 7 board members, who are engaged to the extent that their jobs, travel and family constraints will allow. Each year, we provide 8 or 9 interesting and innovative monthly meetings, ranging from plant tours, to technical speakers, to social gatherings, organized by ourselves or as joint-meetings with other engineering societies. We are heavily involved in Education Outreach activities and provide annual Student Scholarships to top high school students enrolled in a University Chemical Engineering program. We hold two semi-annual Board Meetings to take stock of, plan, and coordinate our activities. We are faced with members who are uninvolved for a variety of reasons, including: students at out-of-area colleges; business travel; out-of-state/country assignments; shift work & late working hours; family & community commitments; living/working at the outside our core area; positions in executive management and not interested in technical matters; belonging to other professional/technical societies that take priority; no time to attend meetings; getting PDH's from online webinars; not needing PDH's; working in non-traditional industries and not interested in traditional programs; and being retired and no longer interested. We brought in a new membership coordinator last year, but his job is keeping him from being fully engaged. We have also brought back a former board member to act as secretary. In the past year, we've established a new website and are now coordinating our meetings through it. There are some 150 non-LS ChE's living in our area who we would like to entice to join our section. Our original Section By-Laws from 1996 were discovered last year, but we've had no time to rewrite them. We understand AIChE is preparing By-Laws to govern all Local Sections.

[The Section] came into existence early 2015. We have made significant progress since then. We frequently interact with [the local] AIChE student chapter. We also closely engage industry/academic/student community on several events like industry seminars, participation in cohosting [local] conferences and increasing visibility within the chemical engineering community here in [the area].

This year [the Section] co-hosted two international conferences. These conferences were held in [the local university] concurrently in which both the local section members and the [local] AIChE student chapter participated actively.

We also had our second annual local section awards ceremony held in July 2016 during the two conferences whereby we introduced an industry service category award for the first time. We also continue to promote/appreciate undergraduate and postgraduate students by recognizing they excellent research/thesis work. Due to our relentless efforts, the events were held successfully and



January 2017

brought great visibility to [the Section]. Our current committee was re-elected through the AGM that was held in May 2016.

Bad section year (Fall 2015 - Summer 2016) due to late start scheduling meetings, good turnouts to meetings once we got started. New members and younger members now becoming more active in section, already got head start for 2016 section year. A fall out of the late start was the lack of coordination with other organizations we typically team with (American Chemical Society is a major one, plus others including SWE and ASME. This relationship is being brought back this year as well. We are also reaching out to the non-affiliated national members in the region: this has resulted in increased meeting attendance.

There is no local Chemical Engineering degree program, therefore no Student Chapter to tie in with. That said, [the Section] maintains an involvement with both the local engineering school and with other engineering and chemistry programs for joint attendance/events where possible. Student attendance is always encouraged, and some members are sponsoring students to attend section meetings. The section website is a new addition that began last year, and we are now working to populate the website.

Counting the [student chapter] members, the [Section] has about 139 members who might attend meetings. A new plant is being built in [the area], which is part of the [Section's] territory. The carpet industry and specialty chemicals businesses [here] are also part of our turf. I think we're supposed to have a Chair, Vice Chair, Treasurer and Secretary. Since December 1995, I believe we've only had 2 or more officers once. The website support from the AIChE office is great, but our site is buried, so that posting a link to it on our Facebook page might not work too well. Finding enthusiastic young members in [the area] and getting them involved is essential to keeping the section alive. I believe well-publicized, interesting meetings held in the above mentioned areas would create the illusion that the section is healthier than it is, and help garner support. But I'm discouraged by lack of feedback on my requests for meeting ideas that I put on our website.

Current state is inactive.

I hope to send an appeal for volunteers to help revive the chapter this year.

Financially sound. Typically 25-30 members show up to meetings. We have good support of the local EPC's and industry. We have a good relationship with the [local] student chapter and hold two meeting a year with them, in addition to sponsoring their events. Currently missing a Secretary and haven't talked any young folk into accepting this opportunity.

For the Calendar Year 2015 - No activities were held. I organized with the other Directors help a slate of candidates including myself as the Chair for the 2016 Calendar Year. Held an Officer Meeting in January 2016 where two New Young Professionals joined as Chair and Secretary. In March 2016, we held our first meeting with a dinner and speaker in [a city within the section] where ~15 people attended. The Officers were all approved.

Our next planned event is 27 October 2016 at [a local university] where we will involve the [university's] Student AIChE Chapter.

For the past 8 years our biggest problem has been a lack of new people, namely a Vice Chair that stays long enough to become the Chair. So our Past Chair has been chair for 8 years or so. I was Chair



January 2017

in 1996, 2006 and now 2016 (or very close to those dates).

I will most likely run for Chair again in 2017 to help our new Vice Chair and recruit a new Vice Chair for 2018. Our goal is to have 3 events/ meetings a year with one big planning meeting every January.

good shape financially

plan to resume monthly activities in October

attendance at events typically between 4 and 8 members; goal is to improve this another goal is to improve communication with use of Linked In, Facebook, and updated web site

I am working to get attendance up and get an idea of what are members want out of the local section. In the last 3 years we have done a couple tours and have tried to maintain a monthly presentation from someone in our network, . This last year the committee was less active. We have a happy hour scheduled in two weeks to get input and more support in the committee. I hope to at least have bimonthly meetings of some sort to start.

I sent a request to the >300 members on the distribution list (not sure if all of them were LS but they are AIChE)mid-August. I received 6 responses to ok dates for the potential Sep/Oct meeting dates at four different locations [within the Section's geographic area]. Not sure what to do at this point. Tentatively planning to set up simple meet over a dinner time with no scheduled agenda or speaker.

In spite of best efforts from the board, we have failed to generate any interest in any kind of activity and we have had none since March 2014. We have had no interest from anybody in serving on the board since 2014. We have not had a quorum in our board meeting to hold an election at least for three years. All the board members have served for at least 5 terms. We also continue to lose board members. We are in discussions with AIChE to close the section.

In the past years the [Section] has gone through a decline. The actual officers: [myself and others] had tried to keep the local section alive. Our most attended meeting is the AIChE Picnic that we have every year at the beach, to welcome the students of the [the Student Chapter] and celebrate the beginning of the new academic year.

We have discussed this situation among us and the consensus is that we will try to re-vamp the section and recruit the young professionals that live in the area. We are planning to have an organizational meeting in October to attract past, actual, and new members and we hope this will be the beginning of a more vibrant section.

It is our hope to build a strong young professional program and draw the majority of our officers from the young professional group.

Local Only members limited to 2 years duration.

We have very low interest by the professional members. Even when we have an interaction with the student section there is little involvement by the professionals, and few of the faculty are members. The section is struggling badly. A telling stat is 639 non-members in the area!

Local section is struggling to bring people out to chapter meetings. Looking forward to attend the [upcoming local] AIChE [conference] to meet other AIChE members and get more exposure in [the local] area.

Maintaining but not especially active

Our current Executive Committee and Board of Directors is primarily composed of "Young Professionals". As long as the local chemical industry remains viable, the section should remain



January 2017

#### strong and viable.

Our local section decided to go dormant after low attendance and little help with planning events. Our officers still respond to needed communications with AIChE, but do not plan regular events.

Our local section is actively working to increase member participation. We've recruited a new Vice Chair/Programs to reinvigorate our monthly meetings.

Our section has several active young members and has an active outreach to members that are in the local [student chapter] (promoting transition to the local section). We are remaining active in spite of the flooding events which occurred a month ago.

Our section is floundering and on the verge of dissolution. No young people are willing to take a leadership role. The only active participants are retiring.

Our section regularly holds meetings of a technical nature including techo talks and plant tours. We support SEED to help students get interested in the science fields. We have many young professionals come to the area and would like to get more information on starting/maintaining young professional interest in our local section.

Over the past three years we have stabilized our financial position via cost cutting (holding more teleconference EC meetings); increased dues; and gradually increasing the number of active YPs in all section activities. Our very active YP group holds about 8 to 10 "happy hour" events at different venues within our geography with good results, i.e., expanded YP involvement.

Section has been inactive (except for one officer maintaining records, etc.) for last several years. Reactivation began the past spring. An officer slate was elected in June 2016. The executive committee has held monthly meetings since then and general membership activities are planned for this fall.

The [Section] continues to focus on providing programming and events that are relevant to connecting chemical engineers in our region. Due to the short distance between [two major cities in our area], our AIChE section would welcome the participation and involvement of members from [there]. Our biggest concern is dwindling membership. Monthly meetings draw only around 15 people and meetings are not even held every month, given the hiatus of the summer months and a winter break. Same executive body is elected year after year for the lack of participation of other members.

The [Section] had no activity last year other than minimum maintenance activities (tax forms, annual report, financial report, paying for PO box, etc.).

The [Section] is hampered by leadership issues. Over the past several years, all of the officers except the Chair and Treasurer either moved away from the area or were forced to step down for health/personal reasons. We have attempted several times (most recently in December 2014) to hold elections for new officers but are unable to hold elections because no one has offered to run for any of the open positions. With just two officers planning and organizing events, the frequency of events significantly decreased, which only decreases interest in the local section from the general membership.

[The Section] efforts in 2016-2017 will focus on two areas:

1. Planning and executing a schedule of local section meetings and events that are both regular enough to attract the interest of the general membership and simple enough that they can be planned and executed by just two officers



January 2017

#### 2. Recruiting new candidates for officer positions, with the goal of holding real elections in 2017.

The [Section] is currently undertaking a revitalization effort to return to a fully active professional society in the [local area]. The reason that engineers join a professional society has changed over the years and the new executive committee is understanding how to best respond. The immediate effort is on getting the word out that there is an AIChE section in the area and encouraging meeting attendance so that we can have a dialog on how to best meet the needs of today's current and future chemical engineers.

The [Section] is stable - holding about 10 meetings per year. We do tours of the different manufacturing facilities in the [local] area, have professionals give dinner talks, and do 1-2 seminars for PDHs each year. We are always looking for new membership, so this year we are going to try and put together a beer brewing competition and tasting. We are hoping this will bring in folks for a more relaxed but still very ChemE networking experience.

The [Section] is stable with a full calendar of activities involving education, outreach, and enrichment. We have a healthy Young Professional organization with good involvement from potential AIChE members. The section has developed ambitious goals for growth and development of its membership and programs.

The chapter is pretty stagnant because we can't find people to help lead the chapter.

The current [Section] leadership team consists of 14 leaders who step up in an extremely timely manner. In support of automated event management and growing our membership, we instituted the following directorships with dedicated new leaders: Eventbrite communications, membership (experienced and young professionals), and fellows/longstanding members. Our new webmaster successfully transitioned our legacy website to a new parent-AIChE website. Our awards chair successfully nominated a deserving member for a Service to Society award. We joined with [a local] SWE [chapter] to engage young minds at 2016 Discover Engineering Family Day. We supported other AIChE local sections as well as ACS with web advertising and event participation. By special invitation from [several Embassies] we engaged in international networking events hosted by ambassadors, and one of our new leaders engaged with several other embassies. Our outreach this year has been far and wide, including travel spanning from [city] to [university] to the AIChE Spring Meeting in Houston, coupled with home events throughout the [section] area. We have worked tirelessly to connect with chemical engineers of all ages (youth, students, professionals, and retirees), and have thoroughly enjoyed working together in the process. The [Section] remains strong.

The current state is very stagnant, with only small numbers despite a large number of chemical engineers in the area. The future state will be much the same, unless we can pique interest, most likely through young professionals. There is no official young professional section, but there is a Facebook page geared towards them.

The Executive Committee meets regularly on a monthly basis with exceptions in December and during the summer. Planning for local section dinner meetings by the EC has only been one to three months in advance.

The local section funds the student sections at the local universities for competition in the Chem E car. The section also helps with student awards for a Green Energy Conference that is sponsored by the IEEE and the local university.

The local section is currently undergoing an operational reconstruction based on the results of a recent full membership survey and executive board evaluation. We are specifically trying to get speakers who can deliver presentation topics of wide interest for the meetings, securing convenient



January 2017

meeting venues to our best ability and embarking on establishing a young professional group.

The section has been inactive for the past 3-5 years. The chair and the past program chair have been in recent contact about starting programming again in the near future. Our expectation is to hold at least 2 events in 2017. The first with the local student chapter at [the university]. We also want to establish a YP group in the section and then engage them in future programming planning.

The section is continuing to hold monthly meetings, along with new and older ideas such as annual AIChE presidential debate and student intern competition. We are stable, but looking to grow more in outreach to members.

The Section is stable and holds regular meetings 9 months of the year, and expects to continue into the future.

The section would be benefitted by additional volunteers to help organize activities. The chapter maintains a website; however, it is difficult to administer with the present tools. The organization is providing grants to a local education foundation to assist in STEM programs.

There are two main reasons, the local section has been unable to grow. First, the economic situation of [the local area] has caused that many graduates leave [the area] for better opportunities. Second, in [the area] to practice engineering you are required to have a PE license, meaning that you are required to be member of the Professional Engineering Organization and pay dues. Therefore, due to economic reasons, the engineer has to decide to join the professional organization and not join AICHE. We continue to look into ways to make the organization grow.

This past year we have maintained our state. While we have struggled to put out a newsletter, we managed to begin an online social media presence. The response to that has been very positive. Our chapter tends to be very young as far as involvement with leadership positions, but our directors tend to be more experienced in the chapter and in their careers. This leadership is very valuable. Our YP section is active and regularly holds well-attended events that are focused on young engineers and families, but also open to the entire membership.

Very active local section; excellent pool of volunteer leader; made significant progress bringing inclusiveness and diversity in attracting new members and in leadership role. Attracting YPs and converting them to long term regular members is a challenge more than ever before, particularly in light of current down turn of our industry sectors.

We are a small group of volunteers that are trying to reestablish the [Section]. We are planning events in sponsorship with local businesses and have had only moderate success with attendance with the majority either being students or just AIChE members. We have also partnered with [the local area Engineering Society] and hope to use this as a platform to recruit members as it is a very active umbrella for engineering societies. We are currently planning technical presentations and discussions. We expect to continue for 1 more year and evaluate the chapter again.

We are currently inactive as a section. We would like some help in identifying new potential officers and/or revitalizing our section.

We are having monthly meetings and 2-3 major events this year. We are planning to sustain this activity for next year along with increasing the number of local members. Also, we are targeting to organize an Engineering Week event for the local middle school in 2017.

We are in a restart for the [Section]. the section has been dormant for about 7 years. With the restart, we have many past administration issues to resolve and we are progressing well. For the membership we have of course restarted meetings and are picking up pace. For the 1st half of the year, we had three major meeting and we off for the summer. For the 2nd half of the year, we are



January 2017

becoming much more active having a planned meeting almost every month. In addition, we will have a joint meeting with the [local] student chapter session at the end of September

We have also started community outreach by sponsoring events for engineering week that was held in the spring and providing scholarships for senior and underclassmen at [the local university].

I think we have made very good progress this year considering the complexities of the restart.

We are inactive. I have retired and would like to pass the treasurer job on to somebody else.

#### We are stable.

We are still currently sending the newsletter to 549 people, but it seems like we should only be sending this information to the 137 paying members. We will consider this for next year. I am unsure if some of the 549 that receive our newsletter are paying ONLY AIChE dues, but not paying for the Local Section. We continue to have the opposite problem compared to most local sections. Our majority of attendance is young professionals in their first 5 years of their career. There is a trend that the professionals with approximately 6 years or more stop attending. This is likely due to a change in life pattern with professionals starting families. We are hosting our first event where we are encouraging members to bring their family. We hope that this might bring in a slightly older demographic.

We are also still working on getting more volunteer involvement with our community. This has been part of our goals for the last few years, but has been a slow process. Luckily, the lack of progress is due to so many other organizations already providing service in the community. We just need to find the right place that has a need for our help in the community.

We have about 200 on our mailing list but we struggle to have more than 15 at our bimonthly (once every other month) meetings. We went to bimonthly meetings because our attendance was so low at the monthly meetings.

Now we meet about 6 times per year.

We are our own LLC, and have our own IRS number. Our annual statement is being prepared by our accountant.

We are working to hold meetings twice a year, one in the fall and one in the spring. Our primary role is working with the student chapter and most events are run in conjunction with [them].

We experienced some sudden and unexpected departures from the Board this year, including our Chair, due to job changes in new cities. Therefore, the Board and the Section were not as active as in years past. However, for the past two years, we have also struggled with lack of member involvement and low turnout for events. The Board could use help with ideas to revitalize the Section.

We have been focusing on our K-12 outreach the past year and will continue to do so. We want to increase local membership and increase our presence for PDH's. We have great networking and informational events. Looking to continue our support and inclusion of the local student chapters.

We have elections scheduled for the next meeting. Planning to rotate some officers. We had 2 events last year, a speaker on Mead preparation, and tour of [a local] Treatment Plant and Wind Farm, and their plan for zero net energy. Disappointed in turnout for both events (10 or less at each). Invited students to both events. Co-sponsored student travel to annual AICHE meeting, attended student chapter fundraiser, co-sponsored Interdisciplinary Water Resources Symposium at [local university]. We are trying to have 4 events over the coming year.

We have maintained the number of Executive Committee members at 14 and provided a for a more



January 2017

diverse group from various engineering fields. We have a great YP group with events every other month. We had a very successful symposium on Biotechnology and Environment which utilized speakers from local and national industries on a range of topics related to environmental stewardship and bio technology. We provide for meeting in [various locations within the section]. This way we can attract more engineers to attend AICHE local meetings and get incorporated into our program. We also provided outreach to colleges and provided awards to top students from the 4 local universities that had Chemical Engineering Departments.

We have one member on our Executive Committee that is under 35. The Executive committee has 8 elected officers and 1 appointed YP Outreach Coordinator.

During the recent 5 years, 4 officers have had repeat terms in 4 positions for a ratio of 1.

Our section held 9 general meetings with meals and program during the year 9/1/15 to 8/31/15 and approx. 9 Exec. committee meetings (many via conf. call). We awarded grants to 3 student chapters. Two grants were for \$500 supporting ChemE car programs and one \$300 grant was for a networking event that allowed students from 5 student chapters to meet. The section hosted a career event for students during [a local trade show] that included a presentation by a recruiter and a panel discussion with ChemE YPs. The section allowed undergraduate students to attend all regular meetings for free. The section participated in two Science and Engineering fairs aimed at high school age students. One was the Career Expo held [locally], and the other was National Chemistry Week celebration at [a hall of science]. The section has a LinkedIn group with more than 300 participants and a website with many resources.

The Institute's database shows our Section having 90 non-student members. Approximately 30 of those regularly attend meetings.

We will be doing a reorganization meeting in mid-October to restaff the leadership team.