CONFERENCE SCHEDULE **Subject to change**

Saturday, October 21st, 2017: Pre-Conference Schedule

8:00 am – 5:00 pm	CIRPA Board of Directors Meeting held in the Stevenson Room
7:00 pm – 11:00 pm	Welcome Social held at the 3 Brewers, Yonge Street, Toronto

Sunday, October 22nd, 2017: Pre-Conference Workshops

Time	Wren Room	Carlyle Room	Scott Room	Seymour Room
8:00 am – 9:00 am	Breakfast - Delegates are on their own			
9:00 am – 4:30 pm	Expo/Trade Show			
9:00 am – 12:00 pm	Sprinting Towards Solutions: An Applied Introduction to Design Thinking and Design Sprints for Institutional Researchers (Half-day workshop) As Institutional Research and Planning (IRP) offices move away from traditional statistical roles, developing new initiatives to incorporate emerging technologies and answer complex questions can be overwhelming. Design thinking and design sprints can make solving even the most complex IRP challenges easier, more enjoyable and more efficient – all without your computer. In this workshop, IRP practitioners will learn to problem-solve using Google Venture's design sprint methodology and how to effectively develop new IRP tools, collaborate with institutional stakeholders, and champion data-driven decision-making. Be prepared to leave this workshop with tips and tricks to host your own IRP sprint. ▪ *Laurie Beatt, Southern Alberta Institute of Technology* ▪ *Corey Buchanan, Southern Alberta Institute of Technology* ▪ *Candice Carrillo, Southern Alberta Institute of Technology* ▪ *Jacqueline Lambert, Southern Alberta Institute of Technology* ▪ *Walter Moreno-Pachon, Southern Alberta Institute of Technology*	Data Carpentry: Using R to Analyze and Visualize Data - A Hands-On Workshop (Full-day workshop) In recent years, the statistical programming language R has become one of the foremost open source technologies in data science. Institutional Researchers can take advantage of this language and related tools to build capacity in data management, analysis, and visualization. In this hands-on workshop, bring your laptops and we'll walk you through the whole process, right from installing the software you'll need to analyzing data. No previous experiences with R or programming is necessary. Participants will be able to take home materials from the workshop to continue honing their skills. ▪ *Stephen Childs, York University* ▪ *Evan Cortens, Mount Royal University*	Academic benchmarking innovations to improve discipline-level peer group selection by using data-informed modeling and promote resource optimization using data envelopment analysis (Half-day workshop) Participants in this workshop will learn advantages and disadvantages of peer-oriented bench-marking including mean-centered, rankings-based and optimization methods. Participants will use longitudinal data to construct peer groups using a latent class analysis structural equation model (SEM). They will use the trial version of M-plus software which produces path diagrams and visualizations. Participants will apply data envelopment analysis (DEA) using R software to identify a program's efficiency in the use of instructional resources. They will learn to compare programs operating at a sub-optimal level with a best virtual program. The analysis will provide the program chairperson with guidance to improve efficiency. Participants are encouraged to bring a laptop and to download the free trial version of M-Plus and the R libraries Benchmarking in R, rDEA, dplyr and tidyr in order to explore the use of these software packages prior to the pre-conference workshop. ▪ *Tom Eleuterio, University of Delaware*	Exploring the possibilities of IRP and CIRPA: A Workshop for Newcomers (FREE half-day workshop) Whether you're new to institutional research or an IR veteran attending your first CIRPA-ACPRI conference, this free half-day workshop is the perfect introduction to CIRPA-ACPRI and the IRP profession. Discover how to get the most from your conference experience as veteran members provide tips and tricks for optimizing your networking and learning. Address the challenges and possibilities of institutional research and planning in round-table discussions, and learn lessons from the painful and sometimes humorous experiences of long-time CIRPA members in our "True Confessions of an Institutional Researcher segment. ▪ *Miranda Pearson, University of Regina* ▪ *Garry Hansen, St. Thomas University*
12:00 pm – 1:30 pm	Lunch - Delegates are on their own			
1:30 pm – 4:30 pm	Data vs Evidence: A Hands-On Workshop (Half-day workshop) What is the difference between data and evidence? What turns data into evidence? How do I evaluate evidence? What is good evidence? This workshop will explore these questions in detail and help attendees improve their tools and frameworks for creating, assessing, and presenting evidence. The workshop will include an interactive – and fun – hands-on section. ▪ *Anthony Gray, University of Toront0* ▪ *Aurora Mendelsohn, University of Toronto*	Data Carpentry: Using R to Analyze and Visualize Data - A Hands-On Workshop (Full-day workshop) In recent years, the statistical programming language R has become one of the foremost open source technologies in data science. Institutional Researchers can take advantage of this language and related tools to build capacity in data management, analysis, and visualization. In this hands-on workshop, bring your laptops and we'll walk you through the whole process, right from installing the software you'll need to analyzing data. No previous experiences with R or programming is necessary. Participants will be able to take home materials from the workshop to continue honing their skills. ▪ *Stephen Childs, York University* ▪ *Evan Cortens, Mount Royal University*	Bluenotes Community Regional Workshop: Bringing Blue technology and community expertise to your feedback process for a greater level of automation and insights (FREE half-day workshop - Sponsor Demonstration) Do you want to reduce repeat requests from your end users such as "Where is my evaluation report?" and "How can I access my course evaluation?" During this workshop we will show you how to set up Blue in such a way that end users can get answers to these questions themselves, while driving higher response rates. In addition, you will get the chance to build reports that will help you gain more insights through demographic, qualitative, and quantitative analysis for various stakeholder levels. You will also get hands-on experience with the all new Blue 7 and Bluepulse, as well as exposure to BlueX, our upcoming survey product. BlueX is designed to enable anyone in your institution (instructor, student, researcher, etc.) to create surveys that meet their needs with ease. ▪ *Mohammed Sheraidah, eXplorance*	The UCASS academic staff survey: progress and brainstorming ideas. (Half-day workshop) In September 2016, the Minister of Science announced the reinstatement of the UCASS (University and College Academic Staff System) survey by Statistics Canada. At the 2016 CIRPA conference in Kelowna, Statistics Canada presented its plans for the reinstatement and redevelopment of UCASS, including expanded coverage to include part-time and college staff. A year later, consultations with respondents and stakeholders across the country are well underway. In this pre-conference session, Michael Martin will update attendees on the progress that has been made to date, and to explore some of the ideas that have emerged from these consultation discussions. The focus of the session will be to explore some of these concepts in greater depth, in an open discussion format. It will also be an opportunity to brainstorm possible strategies on incorporating some of these ideas into the UCASS system, as well as to obtain feedback on how they may be used by our institutional research colleagues. ▪ *Michael Martin, Statistics Canada*
6:00 pm – 6:30 pm	Conference Opening held at the Hockey Hall of Fame			
6:30 pm – 11:00 pm	President's Welcome Address & Reception Dinner at the Hockey Hall of Fame			

Monday, October 23rd, 2017

Time	Wren Room	Carlyle Room	Scott Room	Seymour Room	Churchill Ballroom
7:30 am – 9:00 am	Breakfast served in the Churchill Ballroom				
7:30 am – 5:00 pm	Expo/Trade Show				
9:00 am – 9:20 am	Opening remarks in the Churchill Ballroom				
9:20 am – 10:00 am	The Death of Hunch-Based Decision-Making in Higher Ed Data interpretation can be difficult; even the most savvy administrator may fall back on an occasional hunch. By applying data visualization techniques from the manufacturing industry to our data, we made data interpretation easy. Control charts extract the signal from the noise. They clearly display trends in context, so that the user can identify when performance is truly changing, and when it is not. This means that we know when to act, when to maintain, and when to celebrate. Attendees will learn the basics of control charts, and how to use them to monitor strategies and report on performance. ▪ *Morgan Blair, Medicine Hat College*	Mining graduate surveys to strengthen quality and student choice: Lessons from Ontario's surveys of college and university graduates A number of governments in Canada and elsewhere conduct regular surveys of postsecondary graduates. This activity raises questions about who is supposed to use these data and for what purpose. In this session we propose a framework for how these data might be used to strengthen quality and student choice. Using raw data from Ontario's surveys of college and university graduates, we propose ways to use data better and supplement it with emerging sources of administrative data. We conclude with observations about how better use of these data could lead to more collegial relationships between governments and higher education institutions. ▪ *David Trick, David Trick and Associates Inc.* ▪ *Jinli Yang, The Learning Partnership*	The Successful Launch of a Data Governance Regime Data Governance is undertaken to ensure that an organization can maximize the benefits of its data assets. A Data Governance program aims to improve the efficiency and effectiveness of the business processes throughout the organization through the effective management of data. The University of Regina has, after two years of preparation, successfully launched a Data Governance regime. This presentation will describe all that this entails: groundwork, resources, structure, tools, people, policies, and plans. It will also reflect the factors, including a proof-of-concept dashboard, which played in obtaining institutional support for this initiative. ▪ *Brian Christie, University of Regina* ▪ *Keith Fortowsky, University of Regina*	Evolution of Institutional Research Departments in the Ontario Community Colleges The 24 Ontario Community Colleges took part in two IR Department Inventory Surveys conducted in 2014 and 2017. This session will present the analysis of these two surveys by College size. The presenters aim to provide a sense of how IR departments in the system have evolved over the last few years; identifying common themes in their reporting structure, staffing, roles and responsibilities, challenges and opportunities, as well as expectations for the next 5 years. The presentation will provide baseline data to support the strategic and operational planning of IR offices within or external to the Ontario system. ▪ *Helen Sheridan, Mohawk College* ▪ *Mark Chapman, Sheridan College* ▪ *Max Bernosky, Confederation College*	
10:10 am – 10:30 am	Refreshments served in the Churchill Ballroom				
10:30 am – 11:10 am	Managing Growing Demands from International Students with a Course Section Allocation Model Facing the rapid growth of international student enrolments in recent years, Langara College in Vancouver has been managing the influx of international students with a course section allocation model to achieve an optimal balance in meeting the competing needs between domestic and international students for high- demand courses. The demonstrated predictive model puts the College in the leading edge among its counterparts in the Province in managing international enrolments, and has become the go-to tool for the College's academic leadership team in its course planning process each semester. ▪ *Ian Humphreys, Langara College* ▪ *Larry Xiong, Langara College*	Exploring the Keys to Transformation in Post-secondary Access and Retention: Pathways to Meaningful Work and Lives for Youth from Underserved neighborhoods Exploring the Keys to Transformation is a HEQCO-funded project that continues the ongoing applied research and evaluation being undertaken at Centennial College to improve access, persistence, and retention outcomes in its signature outreach program, Helping Youth Pursue Education (HYPE). We use propensity score matching to analyze the effect of HYPE on three student outcomes. We find that HYPE has a negative effect on its participants for each outcome, however sensitivity tests suggest these results need to be interpreted cautiously. Interviews with HYPE practitioners supports this cautionary prescription and we conclude with recommendations for institutions and the provincial government. ▪ *Huizi Zhao, Centennial College* ▪ *Anthony Bertin, Centennial College* ▪ *Hayfa Jafar, Centennial College* ▪ *Paul Armstrong, Centennial College*	Beyond rankings, the use of evidence based in communication! (Sponsor Session) The session objective is to discuss the influence and impact of the QS World University Rankings whilst also suggesting an alternative tool to rankings. To go over QS World University Rankings methodology and the data collection process. Follow by Stars ratings which assesses universities on how they perform in several areas, like the areas considered in rankings. But rather than comparing institutions against one another, they are judged on how they perform against a set standard. QS Stars is an audit on the strengths and weaknesses of a university. The university provides QS with evidence across dozens of indicators. ▪ *Nicholas Sequeira, QS Intelligence Unit*	Thunder & Lightning: Cognos & Tableau; Info Services and the IR Office Tableau is increasingly being used for Data Analytics in IR offices. Many IR Offices are also taking a leading role in implementation of Data Analytics tools for their entire institutions. Tableau is now often installed to work in conjunction with existing "Enterprise Reporting" tools. However these tools are themselves rapidly adding "Analytics" functions. In particular Cognos v 11 claims that it is "Tableau-like". We will report on our experiences with both products at U Regina, and our experiences leading Analytics implementation(s) in the context of fundamental differences between IR and Info Services (IS) functions. ▪ *Keith Fortowsky, University of Regina* ▪ *Miranda Pearson, University of Regina*	A Consideration of the Applicability of AIR's Duties & Functions of Institutional Research in Canadian Institutions AIR has long been involved in the process of defining institutional research as a profession and a critical function in higher education. This presentation will first provide an overview of, and the research behind, AIR's recent identification of the Duties & Functions of Institutional Research. A panel will then explore these duties and functions within the Canadian context, looking for similarities and differences, and consider the extent to which these definitions provide an effective road map for the future development of Institutional Research across borders. ▪ *Gina Johnson, Association for Institutional Research* ▪ *Mike Krywy, Red River College* ▪ *Tony Olmsted, Northern Alberta Institute of Technology* *Blair Jackson, University of Ottawa*
11:20 am – 12:00 pm	IR in the modern world: Data Warehousing and Dashboarding The University of Alberta demonstrates how it has moved to a state of reporting consistent data, using automated processes to prepare information, along with users across campus having the ability to prepare their own reports. This state has been realized with a fully functioning institutional data warehouse, called Acorn that includes student, staff and financial data, and much more. The University's chosen business intelligence tool, Tableau, sits on the data warehouse, and is the window to the University's wealth of information. ▪ *Deborah Williams, University of Alberta* ▪ *Laura Stewart, University of Alberta*	From Application and Beyond: Tracking Aspirations, Motivations, Experiences, and Outcomes of Ontario's Transfer Students This presentation examines the profiles and pathways of postsecondary students in order to better understand the outcomes and experiences of college applicants with degree aspirations, as well as compare the experiences of those who transfer from college to university and those who do not. Utilizing Academica Group's University and College Applicant Study (UCAS™) database and an online survey, we find that overall, increasing the number of students utilizing the college-to-university transfer pathway may help to reduce inequities in overall university participation. However, there are still inequities in the aspirations of college students that reproduce those seen in the college-university divide. ▪ *Ursula McCloy, Seneca College* ▪ *Claire Henderson, Academica Group Inc.*	Bringing It All Together for Smarter Decisions: Institutional Planning with the Strategic Program Mix Decision Framework This session features a comprehensive approach to campus decision support at the Southern Alberta Institute of Technology. In response to the need for academic planning that is sensitive to a constantly changing environment, Institutional Planning and Analysis developed the Strategic Program Mix Decision Framework. The framework delivers decision-making tools that inform the right-sizing of existing programs and the development of new programs. In this session, common planning questions will be used to demonstrate the tools. Attendees will learn how SAIT has combined reports for business strategy, market alignment, and program planning and effectiveness to make a complete planning toolbox. ▪ *Corey Buchanan, Southern Alberta Institute of Technology* ▪ *Walter Moreno-Pachon, Southern Alberta Institute of Technology*	Constantly Changing Data & Data Requirements Enrolment data that is reported to the Ministry is constantly moving, as well as the data requirements from the Ministry is constantly changing. This can lead to many hours of data validation as well as data management. MacEwan University has completed a project that allowed Research Analysts to validate and analyze this data in half the time it used to take. ▪ *Isabel Madeira, MacEwan University* ▪ *Melannie Angeles, MacEwan University*	
12:00 pm – 1:00 pm	Lunch and Announcements in the Churchill Ballroom				
1:00 pm – 2:00 pm	Keynote Address – David Trick – Churchill Ballroom				
2:10 pm – 2:50 pm	Sheridan Internal Student Mobility Platform: Pathways and Transfer Student's mobility is a reality within colleges and universities. Internally, colleges and universities promote pathways programming to help students achieve their career goals. It is important to monitor student mobility among programs to evaluate planned pathways as well as ad hoc transfers. The presentation is an Innovative Tableau visualization of student mobility within Sheridan programs. The system trucks for each program returning students from other programs and transfers to other programs. The underlying data use student level term enrollment along with demographic profile and success measures. The visualization present aggregations by all combination of possible dimensions of transferred students. ▪ *Mokhtar Noka, Sheridan College*	Canadian Student Employment and Debt: A longitudinal and multi-component perspective based on CUSC-CCREU survey responses Student debt is an important topic for both students and institutional administrators with respect to post-secondary education accessibility. Our longitudinal review of responses to CUSC-CCREU surveys of graduating students (Baccalaureate students in their final year of study) explored the relationships between employed students and non- employed students on their amount of debt, sources of debt, involvement in activities, impact on academic performance, satisfaction with their institution, and other components of student experience. This review also looked at provincial differences. Findings may help inform decisions about sources of funding at post-secondary institutions, such as student financial aid and on campus employment opportunities. ▪ *Wayne Sun, Simon Fraser University and Director, CUSC-CCREU Board* ▪ *Linda Kupp, Thompson Rivers University and President, CUSC- CCREU*	Data Governance and the Small Institution: An Update on the Implementation of a Data Governance Framework at St. Thomas University This session will describe the efforts of St. Thomas University to improve data quality, accessibility and security by implementing a university-wide data governance framework. Building on an earlier presentation at CIRPA 2015 in Halifax, the session will provide an update on the components of the framework completed to date and describe the planned steps moving forward. At the core of the session will be a frank discussion of the challenges of integrating data governance with the business practices and institutional culture of a small institution, as well as a consideration of some practical strategies for overcoming these obstacles. ▪ *Garry Hansen, St. Thomas University*	The UCASS Story: 40 Years of Data Institutions need to be knowledgeable about what is going on in the education world to make sure they do not miss possibilities. Making right decisions often implies having good historical data on their academic staff and be able to contextualize them at the jurisdictional level. The University and College Academic Staff System could be quite useful for that purpose. The survey began in 1937 collecting aggregate data until 1960. From 1960 onwards the survey collected individual record data with complete coverage of all data elements starting in 1970. This presentation will analyse the data over the last 40 years, and highlight trends in areas such as gender, age profile, rank distribution, salaries, subject taught etc. It will tell the UCASS story in an historical context and highlight the analytic capacity of the data base. ▪ *Teresa Omiecinski, Statistics Canada*	
2:50 pm – 3:10 pm	Refreshments served in the Churchill Ballroom				
3:10 pm – 4:00 pm	Developing an interactive course registration dashboard using open source tools to inform strategic enrolment management Mount Royal University recently developed a live, interactive, visualization of course registration patterns. The tool arose from a need identified by deans, chairs, scheduling and the registrar to locate bottlenecks preventing students from getting the courses they needed to graduate on time. This presentation will discuss the development of the visualization tool from initial concept, through development and testing, to eventual production deployment, concluding with a live demonstration of its full functionality. Using R and Shiny, free open-source toolkits, we were able to develop the application in-house in just six weeks and deploy it with minimal support and resources. ▪ *Evan Cortens, Mount Royal University*	Leveraging data tools to tell the story of students' academic journey – Complex analytics translated to value-added decision making tools. Student success is important issue for postsecondary academics, practitioners and policymakers - but its complex, multidimensional nature has often been a black box. Is it really possible to develop tools so faculty and academic managers can use evidence to target services and learning opportunities that enable students to be successful? SAIT has developed an analytical framework that leverages data visualization tools and descriptive and inferential statistical analysis to better understand and explain how student, program, course, and other characteristics come together to influence student progression and success at the individual, program, and institutional level where applicable. ▪ *Walter Moreno-Pachon, Southern Alberta Institute of Technology* ▪ *Jacqueline Lambert, Southern Alberta Institute of Technology*	What High School Guidance/Career Counsellors Told Us about Maclean's Rankings In early 2017 the University of Regina commissioned a survey high school guidance/career counsellors in its regional catchment area. Respondents were asked about their sources of information about the universities in the prairie region and about their participation in Maclean's ranking survey and their use of the Maclean's rankings. This presentation discusses their responses. ▪ *Brian Christie, University of Regina*	Using Remark Office OMR for Your Various Data Collection & Analysis Needs in Higher Education (Sponsoer Session) The Remark Office OMR Software is a multi-purpose data collection and analysis program often used in higher education for testing, course evaluations, surveys, research, and more. During this presentation, Stephanie McKeown of the University of British Columbia Okanagan Campus will demonstrate how she has implemented the use of Remark Office OMR for a study on physics as well as grading exams. Alison Donnelly is the Sr. Sales Representative at Gravic, Inc., developers of the Remark Products. She will be on hand to answer product questions. ▪ *Alison Donnelly, Gravic* ▪ *Stephanie McKeown, University of British Columbia*	

4:10 pm – 5:00 pm	**The Impact of Online Surveys for 3 Ontario Colleges** The changes in technology and students' increasing usage of social media and the online environment is pushing educational institutions to keep up. More and more, students want to complete surveys online using their smart devices or computers. Unfortunately, institutions are facing challenges in reaching the same high participation rates that they had with their paper surveys when they move online. In addition, students are being bombarded by more questionnaires due to the ease of online survey set-up. This session will explore the transition to online surveys for three Ontario Community Colleges including their processes, variations, scope, challenges, successes, and impact. Along the way, they will showcase how eXplorance's Blue online survey software has made it easier to meet these changes, as well as the limitations. ▪ *Helen Sheridan, Mohawk College* ▪ *Connie Phelps, Conestoga College* ▪ *Rob Downie, Fanshawe College*	**Using Tableau to understand the impact of academic policy changes on programs and their students** Academic policy changes are not always implemented with a full understanding of their impact across the organization. For example, a well-intentioned policy raising a program's minimum GPA standard may negatively impact retention. Using Tableau, institutional researchers can identify and explore the impact of academic policies and provide insight into how negative consequences (e.g. lower retention) may be mitigated by better understanding the data. In this session, attendees will learn how NAIT is using Tableau action filters ("fetch" method) to better understand how students and programs may be impacted by academic policy changes. ▪ *David McDine, NAIT in Edmonton, Alberta*	**How to Present Data: Lessons from data visualization failures, deceptions, and disasters** The talk will explore three types of data visualization failure: the good- faith failure to convey information clearly and efficiently; the intentionally deceptive and misleading visualization; and the outright dataviz disaster (laugh and learn). From the analysis of various failures, I will propose generalized lessons for effective visualization and offer tools for detecting data-driven deception. ▪ *Anthony Gray, University of Toronto* ▪ *Aurora Mendelsohn, University of Toronto*	**Replacing the engine while the car is still running: using Tableau to govern, streamline, report, and visualize data from a data warehouse and surveys.** The world of institutional research and planning is changing quickly. Tableau is a tool many offices have adopted to help streamline reporting and analysis. In this demonstration, Plaid will show how we leverage Tableau to help us with: - Data governance through Tableau. - Automated data refreshes. - Daily admissions reporting from an institutional data warehouse. - Transforming survey data for reporting in Tableau. Plaid helps higher education institutions use data to improve their policies, services, and processes. Plaid is a Tableau Alliance Partner. ▪ *Andrew Drinkwater, Plaid Consulting* ▪ *Patrick Lougheed, Plaid Consulting*	
6:00 pm – 11:00pm	Monday Night – 'Explore Toronto' - Delegates on their own				

Tuesday, October 24th, 2017

Time	Wren Room	Carlyle Room	Scott Room	Seymour Room	Churchill Ballroom
7:30 am – 9:00 am	Breakfast served in the Churchill Ballroom				
7:30 am – 4:00 pm	Expo/Trade Show				
8:15 am – 9:00 am	CIRPA Annual General Meeting (AGM) in the Seymour Room				
9:00 am – 9:20 am	Announcements in the Churchill Ballroom				
9:20 am – 10:00 am	**Useful Visualization of Geographic Information Using Tableau – Examples of How Institutional Research Departments Can Use It Today.** Geographic information can be used for more than just creating maps. It can be used by institutional researchers to gain insight into the student population, to understand how school resources can be better leveraged, and to present complex space information in a simply understood manner. Types of geographic data visualizations, Tableau - a data visualization tool, and sources of geographic information will be discussed. Examples will be shown of how the visualization of geographic data can highlight the special needs of a student population, identify groups of people, assist in student recruitment, and better understand how school space is used. ▪ *Joseph Peter McNamara, University of Toronto*	**Refining educational pathways for students: insights from national surveys to inform institutional research on graduates' destinations** This presentation uses data from Statistics Canada's National Graduate Survey 2013 and its 2011 National Household Survey to investigate the further study and employment destinations of Canadian college and university graduates. Outcomes differ markedly by field but for unregulated fields, the proportion of graduates who proceed to further study or employment in the same field is much lower than commonly assumed. This has implications for student services, for curriculum and for the design of pathways between study and work. This work offers institutions national data against which they may compare their analyses of their own data. ▪ *Gavin Moodie, University of Toronto/OISE* ▪ *Leesa Wheelahan, University of Toronto/OISE* ▪ *Ruth Childs, University of Toronto/OISE* ▪ *Annette Ford, University of Toronto/OISE* ▪ *Jinli Yang, University of Toronto/OISE* ▪ *Amanda Brijmohan, University of Toronto/OISE*	**Institutional Analytics as a Reflexive Aid for Strategic Planning at the University of Toronto, Scarborough Campus** We argue that universities should adopt a more reflexive approach to institutional decision-making as consistent with the insights of Beck (1992) and Giddens (1992). In essence we seek to extend the knowledge base associated with Institutional Research and Planning, to account for the challenges associated with environmental knowledge production and delivery. We discuss why this merger is important not only from an efficiency perspective, but as a means of facilitating knowledge production\dissemination itself. To demonstrate the salience of our approach we describe the development and application of various analytical tools used to support strategic planning within the Department of Physical and Environmental Science at UTSC. ▪ *James MacLellan, University of Toronto* ▪ *Naureen Nizam, University of Toronto* ▪ *Fahim Kazemi, University of Toronto*	**Creating a Data-Driven Culture: Humber's Journey** Institutional researchers spend a great deal of time creating data resources and reports and often do not know the extent to which they are being used to inform decision making. This session will detail Humber's journey over the last 2 years to engage stakeholders in the development of data resources and support data-driven decision making. We will demonstrate our new self- service interactive data tools and discuss them with respect to their purpose, design choices, and outreach strategies. ▪ *Corrine Johnston, Humber College* ▪ *Mark Kane, Humber College* ▪ *Daniel Fowler, Humber College*	
10:10 am – 10:30 am	Refreshments served in the Churchill Ballroom				
10:30 am – 11:10 am	**You do not need to be an expert in order to be innovative: A case of creating a completion rates identifier on Tableau** Control chart is a common tool used for quality control. The tool lets manufacturers identify problematic performance that is beyond acceptable limits, which allows manufacturers to address the issues in a timely manner. However, PSE institutional researchers rarely use control chart. This presentation will demonstrate how a control chart is used to identify courses with exceptionally high or low completion rates. More importantly, it will show that institutional researchers need not to be an expert to be innovative and creative. What really matters are the will to think outside the box, to experiment, and to seek help from different resources. ▪ *Chun-On Lam, Thompson Rivers University*	**The Role of Faculty in Student Learning Outcomes from the CUSC 2014 Survey Data (Survey of Middle -Year Students)** The importance of student learning outcomes such as academic achievement (GPA), retention, and satisfaction cannot be over emphasized. Faculty play a unique role in this process. This proposal applied a multiple ordinary/logistic regression model to the CUSC 2014 survey data to explore the role of faculty in student learning outcomes in Canadian postsecondary institutions. Preliminary results indicate that faculty attitudes and behaviors, pedagogical practices, student-faculty interactions, faculty involvement in academic and social integration of students, academic advising, student-peer interactions, student expectations of faculty, and student satisfaction with faculty teaching are significant predictors of student learning outcomes. The model accounted for 82.1% of the variance in student learning outcomes. The results are analyzed and interpreted and discussed in the context of the theoretical, methodological, and policy and practice implications. ▪ *Edward H. K. Acquah, Athabasca University*	**Using the FBS Costing Tool to Inform Institutional Governance and Planning** The FBS Costing Tool is a new resource that can be utilized by institutional researchers and administrators in the pursuit of more effective and efficient collective bargaining outcomes. This demonstration session will show attendees the functionality, range of data produced by and relevance of this new resource in the broader context of ongoing discussions on the financial sustainability of Canadian higher education institutions. ▪ *Jim Butler, CAUBO* ▪ *Ryan Johnston, University of New Brunswick*	**Taking Institutional Analysis to the Next Level: Big Picture Insights to Inform Decision-Making** In this session, we introduce participants to data synthesis methods that draw on one or more data sources, like databases, surveys, and published research, to infer conclusions and recommendations. These methods are common in the health and social sciences, where interdisciplinary, and multi-institutional, groups come together to collaboratively engage in research that aims to address a substantial challenge facing their worlds. We will engage participants in a discussion on how synthesis methods can be applied in institutional research, what postsecondary challenges we can collectively address using synthesis research, and how the results will help us to better inform our decision-makers. ▪ *Ashley Blackman, Red River College* ▪ *Stephanie McKeown, University of British Columbia – Okanagan*	**moving forward Postsecondary Education data at Statistics Canada** Over the last few years, Statistics Canada has invested resources in the modernization of its postsecondary education programs. Following the creation of an Education Longitudinal Linkage Platform, a framework on Education and Labour Outcomes of Students and Apprentices has been developed. In this session, Statistics Canada will walk you through the framework, talking about the key elements, the pillars, the key indicators/outputs and the diverse linkage possibilities. Some results will be presented to demonstrate the potential of the information that could be made available to the community of users through the Research Data Centres as well as to the general public. There will also be a presentation showing a provincial perspective of graduate outcome indicators and how participation in postsecondary education impacts geographic mobility and income. ▪ *Louise Marmen, Statistics Canada* ▪ *Sylvie Gauthier, Statistics Canada* ▪ *Janm Mehta, Alberta Advanced Education*
11:20 am – 12:00 pm	**Utilizing Course Scheduling Dashboards to Improve Retention, Time-to-Completion, and Graduation Rates while Saving Money** This session explores how utilizing dashboards can assist Canadian institutions in optimizing course scheduling, improve retention, time-to-completion (degree velocity), and graduation rates while potentially saving millions in instructional expenditures. Building upon a national sample, the session explores several case studies of United States and Canadian institutions that have implemented many best practices based upon course scheduling dashboard metrics. Specifically, by optimizing on-grid scheduling, institutions can improve retention by seven percent and reduce instructional expenditures by four percent. Generally, findings suggest that financial, facilities, and institutional researchers can greatly assist in improving course scheduling and better align institutional resources. ▪ *John Barnshaw, Ad Astra*	**Adventures with Data Definitions and Reporting (and maybe some solutions)** Many institutions struggle with complex data definition problems that hinder production of meaningful reports. This session will be structured like a Special Interest Group (SIG), focused on student data. Attendees will present their definition questions and discuss solutions. The University of Regina will kick off the session with discussion of how to define/report: "duplicate headcount" students; active and withdrawn students for capacity planning; and "at risk" students. Attendees will gain a network of contacts with whom to continue discussions following the conference. Attendees are encouraged to contribute questions of their own prior to the session - please email miranda.pearson@uregina.ca. ▪ *Miranda Pearson, University of Regina* ▪ *Keith Fortowsky, University of Regina*	**Collaborative work between CUSC and the MPHEC: A Comparison of Maritime and Non-Maritime University Students on Education Debt and the Transition to Employment using the CUSC 2015 Survey of Graduating Students** The Maritime Provinces Higher Education Commission has engaged with the Canadian University Survey Consortium (CUSC) board to analyze data from the CUSC 2015 survey of graduating students. This presentation will explore information on education debt and the transition to employment, comparing Maritime university students with students elsewhere in the country. ▪ *Isabelle Cormier, Université de Moncton* ▪ *Dawn Gordon, Maritime Provinces Higher Education Commission*	**Departmental productivity and cost data from the Delaware Cost Study can yield data-informed peer groups that can be used with Data Envelopment Analysis to guide targeted improvement in teaching workload allocations to optimize the use of resources.** Academic bench-marking by four-year institutions in higher education can be improved by focusing on discipline-level characteristics, the use of innovative statistical modeling methods and by offering actionable guidance for departmental improvements. Traditional bench-marking concentrates too heavily on past activities and average performance. Data envelopment analysis (DEA) shifts the focus to the optimal comparators in a peer group and uses their accomplishments to guide departmental improvement. Data-informed peer group selection optimizes the comparator group for conducting DEA. There may be multiple paths to achieve optimal resource utilization and DEA can illuminate those paths. ▪ *Tom Eleuterio, University of Delaware*	
12:00 pm – 1:00 pm	Lunch and Announcements in the Churchill Ballroom				
1:00 pm – 2:00 pm	Keynote Address – Christine Keller – Churchill Ballroom				
2:10 pm – 2:50 pm	**A non-traditional approach to measuring the economic impact of a PSE institution** Often, the calculation of economic impact involves a tally of the total injection of spending into the local economy. This approach may be appropriate for private enterprise, but didn't sufficiently align with Conestoga's primary mandate to serve the needs of the local labour market. This presentation will outline how the IR office utilized an approach created by Larry Smith, Adjunct Associate Professor of Economics at UWaterloo, to determine that 55% of our local adult population and 45% of our local resident employment, has received education/training from Conestoga. Our graduates contribute 2.3 billion dollars each year to the community. ▪ *Connie Phelps, Conestoga College* ▪ *Kellan Eckstrom, Conestoga College*	**How many rocket scientists and burger-flippers are we graduating? Accurately measuring underemployment as an indicator of PSE graduate success.** (Sponsor Session) "Underemployment" is a key concept in measuring graduate outcomes. While employment rates are favourable for PSE graduates, there remain challenges with adequately measuring underemployment rates. This is increasingly an area of interest for PSE institutions, as they attempt to collect evidence of their graduates' success in making the school-to-work transition. This paper outlines the various components of underemployment including both skill underutilization and involuntary part-time employment. We present various approaches to measuring underemployment ranging from self-reports (less reliable) to efficient occupational analysis algorithms that IR offices can use to produce more reliable and valid measures of their students' outcomes. ▪ *Victoria Díaz, DPM Research* ▪ *Celine Pinsent, DPM Research* ▪ *Pierre Mercier, DPM Research & University of Ottawa*	**Visualizing Policy Change: A showcase of data visualization tools that use real data to visualize changes to Ontario's funding framework** Ontario's funding model is changing. With the introduction of a "corridor model," institutions face different outcomes when their enrolments fall above or below a negotiated target. This session will provide a detailed description of this policy change, showcase a dynamic visualization tool designed to help institutions and other stakeholders understand these policy changes and their impacts on institutional finances, and introduce the technology behind the visualizations. ▪ *Paul Jarvey, Ontario Ministry of Advanced Education and Skills Development* ▪ *Alex Chen, Ontario Ministry of Advanced Education and Skills Development*	**Assessing and responding to labour market demands** Canada's colleges and institutes have evolved into sophisticated providers of education that respond to the demands of the workforce. These demands change very quickly and it is estimated that sixty-five percent of today's students will be employed in jobs that do not yet exist. Understanding the current and future labour market requirements is necessary but very challenging. This session will detail the use of data to understand the link between post-secondary programs and the labour market enabling institutions to assess current and future needs of the workforce and plan programs and enrolments accordingly. ▪ *Shelby Eyre, Humber College.* ▪ *Corrine Johnston, Humber College*	
2:50 pm – 3:10 pm	Refreshments served in the Churchill Ballroom				

3:10 pm – 4:00 pm	**Insights and Forecasts from a Highly Detailed Tableau-based Model of Revenues and Costs** Over the past two years, Finance and Institutional Research at Sheridan have collaborated to build a fully validated and comprehensive account of all academic costs and revenues for each Faculty. The resulting model, represented in Tableau, allows for a highly detailed analysis down to individual course-sections and simultaneously high-level historical views over ten years of data. We describe how we built the model, the challenges, and insights it provides into drivers of revenues and costs. We will also provide a brief demonstration of its capabilities. The presentation concludes by discussing the foundational nature of the model for the College going forward and next steps to link the model with enrolment forecasts and conduct financial simulations. ▪ *Mark Neumann, Sheridan College* ▪ *Jenny Tam, Sheridan College*	**What Employers Need: Skills For Tomorrow - A New Approach to Labour Market Information** The Skills for Tomorrow employer survey project was a collaboration between Durham College, Durham Workforce Authority (DWA) and the Region of Durham as part of the Durham Workforce Authority-Local Employment Council (DWA-LEPC) initiative funded by the provincial government. This presentation delineates the innovative approach embedded in the Skills for Tomorrow survey to collect sector-specific occupational labour market information (LMI) for the Region of Durham, and presents summary findings for the regional employers' skills requirements and supply perceptions. The project also includes the self-employed group which is often under-represented in LMI but is increasingly a key driver of economic growth. ▪ *Rashmi Gupta, Durham College* ▪ *Heather McMillan, Durham Workforce Authority* ▪ *Matthew Hack, Durham College*	**Tableau: Self-Service is the next chapter (Sponsor Session)** Tableau has been used to tell the story of IRP for many years, now it is time to take the journey to the next level. If you have used Tableau Desktop, this session will illustrate how to bring self-service to your institution. ▪ *Cindy Courtemanche, Tableau Software*	**Assessing Strategic Mandate Agreement differentiation with text analytics** Semantic or text analytics is the process of discovering information from unstructured text through the identification of trends, topics, and patterns. Software tools can be used to understand how words or phrases are linked or associated in the text material. Provalis Wordstat was used to assess Strategic Mandate Agreement content for 24 Ontario colleges. Categorical dictionaries were developed to align with occupational clusters and outcome indicators. Between-institution analysis provides comparative visual mapping of patterns and associations for insight and discussion. ▪ *Mike Rivard, Fanshawe College* ▪ *Rob Downie, Fanshawe College*	

Wednesday, October 25th, 2017: Association Meetings

9:00 am – 5:00 pm	Canadian University Survey Consortium (CUSC) - Stevenson Room
9:00 am – 3:00 pm	Polytechnics Canada Meeting - Seymour Room