

Quello Center Report for Advisory Board Meeting

Up-Date of December, 2017

Executive Summary

Since the last meetings of the Quello Advisory Board in Washington DC, in September 2016, and in East Lansing, in May 2017, the Quello Center has stepped up efforts to seek research funding, while continuing to pursue several new and existing lines of research, such as work on search and politics with Google. In addition, the Quello team has continued to build on the identity of the Quello Center, such as completing work on the Quello Digital Archive.

New grant and funding proposals that have been developed and submitted include a number that build on the Quello Center's ongoing research concerning digital policy and digital inequalities, including a study of Internet divides in Detroit and an extension of our work with Google on fake news, filter bubbles, and echo chambers. In addition, a proposal will be submitted for funding from the UK's FCO to support analyses from our cyber security work.

The team continues to develop publications of their work from grant and contract supported research, as well as academic publications. The team has also engaged in substantial outreach concerning findings from the Center's digital inequalities, wireless, and search projects.

In addition, the Quello Center is going live with the digital collection of James Quello's papers. This work, led by Bill Dutton with the help of Lauren Lincoln-Chavez, Valeta Wensloff, Scout Calvert, and Anne Marie Salter, will help to preserve the legacy of James Quello's life and work.

New Developments and Issues

Research Proposals

The Center sought funding for several projects in the past months. We were successful in securing a gift from Google for further development of our project on fake news and filter bubbles, and funding from Detroit's Rocket Fiber for a study researching digital divides in neighborhoods of Detroit, as well as seed funding from MSU for digital access to facilitate prisoner rehabilitation. In addition, we are pursuing funding options to research on smart cities, rural broadband, and cyber security capacity. Details are reported below.

Outreach

The Center continues to engage in outreach on a number of fronts. Google supplemented its support of our project on search and politics not only through additional funding, but also directly supporting travel to present in Oxford and London, Hamburg and Berlin, Rome, Paris, Ottawa and Toronto, Visby, Sweden, and Madrid. These events have helped bring our findings to opinion leaders in government, politics, and academia, not only through the report but through this series of presentations and growing coverage and recognition of our research in the press. In 2018, additional talks are planned in Montreal in August, Washington DC in September, and a tentative trip to

Mexico City (rescheduled due to earthquakes) to talk at the National Autonomous University of Mexico. Other trips are scheduled for invited talks in Australia and Lisbon, Portugal.

Bill Dutton has also been invited to join the Advisory Board for UNESCO's global multi-stakeholder consultation process on defining indicators for Knowledge Societies that will run until July 2018. In a related development, the report that Bill wrote for UNESCO, *Keystones to Foster Inclusive Knowledge Societies* (2015), has been translated into eight additional languages to extend its reach. Bill has also been asked to apply for inclusion on a High-Level Expert Group on Fake News organized by the European Commission.

Quello Library

New acquisitions have continued to keep the Quello Library up-to-date on publications central to its mission, and to serve as a valuable resource for Quello faculty, staff, and students.

Digital Archive: the James H. Quello collection

The Quello Archive project began in September 2016 to digitize the Center's holdings of James H. Quello's speeches and notes while an FCC Commissioner. We have all text prepared, along with videos, photos, and awards. Materials will be live December 14, 2017. The official launch follows our December Advisory Board Meeting and includes a kick-off event and ceremony.

Quello Center Online

The Quello Center's outreach includes our website, blogging, Twitter account, video archive of talks, and Facebook page. If you have not already done so, it would be useful for you to:

- Learn more about us through our blog at <http://quello.msu.edu/>
- Follow our Twitter account @QuelloCenter
- Check out our Flickr account at:
<https://www.flickr.com/photos/quellocenter/albums>
- Like our Facebook page at <https://www.facebook.com/QuelloCenter/>
- Sign up for occasional Quello Center news at: <http://quello.msu.edu/subscribe/>

In addition, we have an online working paper series on the Social Science Research Network (SSRN) where you can browse and download our papers. See: http://papers.ssrn.com/sol3/JELJOUR_Results.cfm?form_name=journalbrowse&journal_id=2680391.

We are continuing discussions of how to evolve our outreach to maximize the potential of social media, and welcome suggestions. In the coming months, the Quello team plans to revisit and revamp the Quello homepage, and is considering adding an Instagram account. Already, a student paper in Communication found that the Quello Center has a remarkable visibility and centrality within the College, due to its activity offline and online. Additionally, early response to our search for a new director of the Center suggests that our online visibility has substantially improved.

Development

The Director has worked with the Development Office in the College to prepare a document to pledge support to the Quello Center. This request will be sent to the original set of contributors to the Center before the end of 2017, focusing attention on the 20th Anniversary of the Center in 2018.

Staff Changes

In September, the Quello Center welcomed Dr. Laleah Fernandez as a new post-doctoral research associate. Dr. Fernandez is a Michigan State alumna who was working as an assistant professor in the Department of Information and Computing Science at the University of Wisconsin – Green Bay. She earned her Ph.D. in Media and Information Studies, her M.A. in Advertising and her B.A. in Journalism, all from MSU. Her research interests include network analysis and the role of new and emerging media in community-level and global mobilization efforts.

In October, our research assistant professor, Aleksandr Yankelevich, left to join Kansas University as the Associate Director of the Brandmeyer Center for Applied Economics in KU's School of Business.

The search for a new Quello Center Director is underway. Currently, the search committee is reviewing applications for the position. The search will be discussed in further detail at our December Advisory Board Meeting in order to gather feedback from the Advisory Board about the direction of the search, ways to reach qualified candidates, and desired characteristics of candidates.

1. Current Projects

1.1. Search and Politics: The Role of Search in Shaping Political Opinion

Global debate over the impact that algorithms and search can have on shaping political opinions has been increasing in the aftermath of 2016 election results in Europe and the US. Powerful images of the Internet enabling access to a global treasure trove of information have shifted to worries over the degree to which those who use social media, and online tools such as search engines, are being fed inaccurate, fake, or politically-targeted information that distorts public opinion and political change. There are serious questions over whether biases embedded in the algorithms that drive search engines and social media will have major political consequences, such as creating filter bubbles or echo chambers. For example, are search engines and social media providing people with information that aligns with their beliefs and opinions or challenging them to consider countervailing perspectives? Most generally, the predominant concern is whether or not these media have a major impact on the political opinions and viewpoints of the public, and if so, for the better or worse.

This study asked Internet users how they use search, social media, and other important media, for political information, and what difference it makes for them. We conducted an online survey of stratified random samples of Internet users in seven nations, including Britain, France, Germany, Italy, Poland, Spain, and the US.

The descriptive and multivariate findings cast doubt on deterministic perspectives on search. We find that technology matters – search indeed plays a major role in shaping opinion – but it is not deterministic. For example, the thesis of a filter bubble is overstated, as our pattern of findings counter this expectation. For instance, search engines are among an array of media consulted by those interested in politics. Another more sociotechnical deterministic narrative is around the concept of echo chambers, where users enabled by increased media choice and social media tend to surround themselves with the viewpoints of likeminded people. Our evidence contradicts this view as well. Most of those who search for political information expose themselves to a variety of viewpoints. Results also demonstrate that research has tended to underestimate the social shaping of technology. National cultures and media systems play an unrecognized role, as well as individual differences in political and Internet orientations. This study shows how overestimating technical determinants while underestimating social influences has led to disproportionate levels of concern over the bias of search.

The findings suggest that misinformation can fool some search engine users some of the time, suggesting that a sizeable group of users could benefit from more support and training in the use of search engines. Also, the findings should caution governments, business, and industry from over-reacting to panic over the potential bias of search in shaping political information and opinion.

Status: The main report has been completed for Google, and is being widely read. The team is presenting the work, and developing papers based on further analysis of this data set. A follow-on proposal has been accepted by Google to support further analysis of the survey data and dissemination of the results. For example, the team has presented a paper at TPRC 2017 on the project, which will be revised for submission to a journal. We are also composing two book chapters for the second edition of “Society and the Internet”, edited by Mark Graham and Bill Dutton. In addition, the team has submitted a panel proposal and a full paper to the ICA conference.

Another paper is underway that explores the concept of the Highly Vulnerable. This paper identifies those most likely to be vulnerable to the risks of fake news, echo chambers or filter bubbles. By developing a simple, operational definition of the ‘vulnerable’, the paper estimates the small proportion of Internet users who are at risk across these countries, and seeks to identify their demographic characteristics.

1.2 Digital Inequalities

1.2.1 Broadband to the Neighborhood in Detroit

This project investigates the degree that neighborhoods in Detroit are disconnected from the Internet—not online—and what could be done to increase digital equity and digital inclusion across three urban neighborhoods of the city.

The team utilizes a mixed methodology to uncover barriers to home broadband adoption in Detroit. Working in collaboration with the Wayne State University Center for Urban Studies, the Quello project team is conducting telephone surveys with residents across three Detroit neighborhoods. The surveys focus on current access and use

levels, attitudes toward the Internet and technologies in general, social capital, and other factors related to Internet adoption and use. In addition, the project team is conducting focus groups with residents and stakeholders, as well as informal interviews with stakeholders who are invested in the revitalization of Detroit to get a better in-depth understanding of specific factors that prevent Detroit's residents from using the Internet through home broadband access.

The team is comprised of researchers from the fields of political science, sociology, Internet studies, and information & communication sciences. The Quello project team is comprised by faculty of the Center and Department of Media and Information, including Bill Dutton, Laleah Fernandez, Keith Hampton, and Bianca Reisdorf.

Status: The team is close to completing the data collection for this project. A forum will be held on 18 December in Detroit, and the report will be available at the beginning of 2018.

1.2.2. ICTs and the Prisoner Reentry Process

With seed funding from the MSU S3 and MSU LAP grants, this project investigates if and how information and communication technologies currently feature in the prisoner reentry process. The project examines to which extent parolees are currently using ICTs and what for, as well as how ICTs could potentially improve the reentry process for parolees and parole officers alike.

Together with colleagues from the School of Criminology and Criminal Justice and the School of Social Work at MSU, the research team will conduct focus groups with parolees and in-depth interviews with parole officers and other people involved in the reentry process. The goal of the study is to develop a framework in which ICTs could be used to improve reentry outcomes for parolees. The findings will inform a larger grant proposal to the National Science Foundation (NSF) and the National Institute of Justice (NIJ).

The team is led by Bibi Reisdorf, RV Rikard (Department of Media and Information), and Jennifer Cobbina (School of Criminology and Criminal Justice). In addition, Tom Holt (Criminology) and Sheryl Kubiak (Social Work) are involved in an advisory capacity. The team received research funding to hire two graduate research assistants, one from Criminology and one from Media and Information.

Status: The team received notice of the funding in November 2017. They are currently recruiting RAs and establishing a working relationship with the Michigan Department of Corrections as well as submitting IRB documents.

1.2.3. Wireless Innovation for Last Mile Access (WILMA)

A key question facing many broadband Internet service providers and policymakers is: How can wireless technologies be used to best leverage fiber backbone networks and

cost-effectively extend high-speed connectivity deeper into the nation's still-underserved communities, such as in deep rural and distressed (sub)urban areas?

The Quello Center undertook a six-month project for Merit and the Quilt group of research and education networks (RENs) to examine wireless solutions for last mile access to broadband Internet services. The Quello Center developed a policy-oriented analysis to foster a better understanding of the combination of spectrum resources and business approaches that could be used to achieve that goal. The Quello Center's research team combined two complementary approaches.

The first focused on case-level analysis carried out through detailed interviews with business leaders, entrepreneurs, and public institutions, of strategies that are being implemented in using wireless technology to extend backbone and middle mile networks into underserved communities. The second approach focused on an analysis of wireless spectrum policy and regulation. The project examined current and future directions of spectrum policy and regulation in a historical context, specifically asking: What spectrum bands are available and suitable for which deployments, and what are the federal, state, and local policies that help to foster or impede network deployment?

The findings of this research have been reported in a series of reports and working papers under preparation for publication, augmented by Webinars designed to stimulate a dialogue with backbone providers and others focused on innovations in last mile access and service provision. In addition to two research reports and a forthcoming publication, this project has created new directions for Quello research, described below.

Status: Research completed, including a publication in *Digital Policy, Regulation, and Governance*. An additional manuscript that focuses on wireless as a means to address the homework gap was submitted to *Telecommunications Policy* and is currently under review.

1.2.4. ICT4Detroit

Through MSU's Michigan Applied Public Policy Research (MAPPR) grant, the Quello Center has been conducting research to understand the role of information and communication technologies (ICTs) in shaping development initiatives in Detroit. Detroit is emerging as a test bed for initiatives aimed at reversing the city's decline and building on growing signs of progress, at least in the central business district. These efforts are coming from a range of sources, including federal, state and local governments, major corporations, startups and startup incubators, social entrepreneurs, philanthropists, nonprofits, and citizen-driven community groups. While the depth and dimensions of Detroit's challenges may be historically unique, so too are the opportunities for redevelopment-focused communication, visualization, computation, and collaboration afforded by today's ICTs like the Internet and related social media. Some initiatives are creatively and effectively using the Internet and related ICTs to empower nonprofits, community groups, and individuals involved in Detroit's redevelopment. The focus of this project is where, when, and how the Internet could further empower a number of Detroit's redevelopment initiatives. Our exploratory research is initially focused on the

role of the Internet in supporting nonprofits and other groups committed to the redevelopment of Detroit. In-depth interviews are being conducted in a set of organizations identified by a webmetric analysis of 1,300 nonprofits funded by grants to support Detroit initiatives. This exploratory phase was designed to refine our understanding of this complex and huge city and the wide range of (non)ICT initiatives involved in supporting redevelopment efforts. The interviews have been completed, shedding light on the role of the Internet and social media in the activities of organizations traditionally tied to interpersonal networks across the city.

Status: The main findings were presented at the 2016 TPRC Conference. The findings are informing the Broadband to the Neighborhood Project and Dutton's book on the Fifth Estate.

1.2.5. Digital Inequality at MSU

Information and communication technologies (ICTs) have permeated education at almost all levels, affecting learning and pedagogy alike. Inside the classroom, ICTs have allowed educators to redesign the way that knowledge is acquired. For instance, in a college setting, laptops and other digital devices have become a commonplace classroom fixture that can allow instructors to interact with their pupils in previously unthought-of and innovative ways—so much so, that in many institutions, laptop ownership is considered a prerequisite for enrollment and participation. At Michigan State University, students are required to own either a desktop or a laptop computer, but are encouraged to bring a laptop to class. Moreover, certain classes that are mandatory for all enrolled students require laptop use. However, observations across certain classes indicate that not all MSU students own a laptop and that this could be detrimental to learning when laptop use is an integral component of the classroom experience. The research team at MSU's Quello Center has analyzed a rich dataset from MSU's yearly MAP-works survey and arrived at significant conclusions concerning both the factors that lead to laptop ownership and how laptop ownership relates to academic success during the crucial formative first year of college.

Status: Data analysis has been completed, and a journal paper is being finalized for submission for a special issue on education and technologies of the American Behavioral Scientist.

1.3. Cybersecurity

1.3.1. Cybersecurity Capacity Building Center, Oxford Martin Institute

Bill Dutton continues his role as one of the Associate Directors of the Oxford Martin Institute's Global Cybersecurity Capacity Center at the University of Oxford. Bill leads the 'culture and society' dimension of the center's research. He has been working on the specific notion of a cybersecurity 'mindset' with papers of his own and with Ruth Shillair, a doctoral student in Media and Information, and a paper on the impact of cyber security capacity based on a comparative analysis of 120 nations. This work is supported by the Foreign and Commonwealth Office (FCO) in the UK, along with other partners from other nations.

Status: A paper on a cybersecurity mindset has been published in *Internet Policy Review*, and an abridged version being reprinted. Another paper on mindsets is being completed for submission to a journal. A paper on the impact of cybersecurity capacity was presented at TPRC 2017, and is being turned into a book chapter, and a journal submission. This paper has led to a request for further analysis for the UK's FCO.

1.3.2. *Cybersecurity Initiatives at MSU*

Johannes Bauer has been leading efforts to join up a wide array of cybersecurity initiatives across the university.

Status: A series of meetings are being led by Professor Bauer.

1.4. **Presidential Debates Study**

Bill Dutton and Craig Robertson at the Quello Center are collaborating with Jay Blumler and Stephen Coleman at the University of Leeds and Rob Ackland at the Australian National University on a study of the democratic affordances of the televised Presidential Debates. A study of the last televised UK Leadership Debate arrived at a set of affordances, such as clarification of the issues in the election. The findings were based on focus groups and survey research. The Center sought to take these findings and compare them with the affordances perceived by viewers of the first televised debate between Presidential candidates Donald Trump and Hillary Clinton, but based on a content analysis of Tweets before, during, and following the first debate. We have the entire fire hose of Tweets, have drawn a sample of 2,000, and are in the process of content analyzing them. It is apparent that Twitter users are not observing the debates so much as engaging in the debate as participants, a finding that is reshaping the entire focus of this study.

Status: Currently, the team has developed the coding scheme for content analysis, and has recruited a student who has helped with the content analysis of the random sample of Tweets. We expect to draft a paper on this project during the Spring of 2018.

2. **Grant Proposals under Preparation or Review**

2.1. *NSF Digital Rehabilitation: ICTs in the Prisoner Reentry Process (rejected in first cycle; being considered for revision for resubmission in July 2018 cycle based on the work described in 1.2.2.)*

The current focus in Criminal Justice theory and practice is on using technologies to monitor and control prisoners and parolees; for example, use of ankle monitors for parolees. Rehabilitation and reentry policies, established in the 1960s and early 1970s, ignore the technological changes that have transformed society. Our project proposes a paradigm-shift by bringing established digital inequality models into the scientific understanding and conceptualization of rehabilitation and reentry.

Prior to incarceration, Internet access was not available to many inmates due to lack of socio-economic resources and/or the beginning of an inmate's sentence prior to the wide spread of the Internet. Prisons do not allow inmates to access the Internet. Recently released inmates who served mid- to long-term sentences have had little to no direct exposure to digital and Internet-enabled technologies. Parolees re-enter a highly technology-dependent society and must either learn or (re)learn digital skills and Internet-enabled technologies. Previous research reveals that the level of social and human services (i.e., employment, housing, and health care) significantly impacts reentry and reduces recidivism. This access now relies heavily on digital skills and Internet-enabled technologies; yet, there is limited research examining the process of *digital* reentry into society. Readjusting into a "speed of light" society as well as stigma may reduce the parolees' confidence, well-being, as well as mental and physical health.

Our proposed project advances current theories of rehabilitation by integrating established digital inequality models, which argue that full and successful participation in society requires both offline and online components and resources. We will conduct face to face interviews with parolees, parolee family members, and parole officers, with a focus on the impact of digital technologies (or lack thereof) in the reentry process. The in-depth interviews will inform the development of a digital skills reentry training intervention. We will re-interview all parolees 2, 4, and 6 months after the intervention to explore the impact of the training during re-entry into a technologically dependent society. The project is expected to lead to follow-up funding proposals and projects in step-down facilities and prisons.

2.2. Cyber Security Capacity Analysis

The UK Foreign and Commonwealth Office values an analysis we have undertaken of the degree that building cyber security capacity actually makes a difference – it matters. We are preparing a proposal to request funding from the FCO to further develop this analysis.

3. Completed Projects and Spin-Offs

3.1. Bridging Rural Access Divides (BRAD)

The State of Michigan's research and education network (REN)—the Merit Network—partnered with Microsoft, Allband Communications Cooperative, and Gigabit Libraries Network (GLN) (Digital Village Associates) to improve broadband connectivity for a rural area in Northern Michigan. This is a technically and organizationally innovative project in deploying TV White Space (TVWS) and related communication technologies to cover Alpena and Montmorency Counties to reach rural populations. This wireless initiative sought to support a multiple set of services, from access to broadband by residents and school children riding on buses to the monitoring of park trails and providing tele-medicine services. The project's vision is to draw from the lessons learned from this initiative to reach rural areas nationally to build a "Smart Country."

Quello Center proposed a more focused approach to studying rural digital divides to study the implementation and outcomes of the Smart Country initiative through a formative evaluation project, entitled Bridging Rural Access Divides (BRAD). The research involves embedded case studies of up to 8 different uses of wireless to provide services across the counties. It employs multiple methods in ways uniquely suited for each use case that will inform an overview of the two-county case study as a whole. Evidence gathered from the research will document the implementation process and its outcomes related to the deployment of wireless broadband. Lessons learned from the project will inform refinements of this approach to the provision of wireless that can be applied across the US.

Status: Research proposal remains under discussion with Merit Network and other parties. The Quello Center is part of the project's MOU but Merit has since taken a supporting role to this project, and our support seems doubtful.

3.2 Telecommunication Regulation

3.2.1. Net Neutrality

The Federal Communications Commission's Open Internet regulations implementing a set of non-discrimination rules in support of "net neutrality" have galvanized a wide variety of stakeholders in opposing camps around the wisdom of these regulations on the future of the Internet. Proponents argue that net neutrality will keep the Internet "open" and in line with its early vision by not advantaging those who can pay for fast lanes. Opponents have raised numerous concerns about the role regulation could play in constraining efficiency, competition, investment, and innovation of the Internet and patterns of its use by individuals and businesses.

However, supporters and opponents alike believe the implications will be of major importance to the future of the Internet in the US, and also globally, as other nations might well be influenced by policy and regulatory shifts in the United States. Others see this regulation as more symbolic, in that it is not a real change, and unlikely to have real impacts on businesses and industry or use of the Internet. It is therefore important that these countervailing claims about the value and risk of net neutrality become a focus of independent empirical research.

In order to evaluate the varying claims regarding net neutrality, the Quello Center collaborated with researchers in departments across Michigan State University to undertake an empirical and theoretical program of research on net neutrality. Work in this area included a proposal to the Net Institute in May (which was not successful) along with ongoing empirical research seeking to understand how net neutrality could impact last-mile broadband investment by Internet Service Providers. This research relies on confidential data courtesy of Cost Quest Associates, an economic network modeling organization that helped design the FCC's Connect America Fund Cost Model. Related, more theoretically anchored work, investigates platform pricing to differentiated participants on different ends of the platform, including the likely impact and limitations of ISP data caps and zero rating policies. In light of the FCC's ongoing

“Restoring Internet Freedom” proceeding, the relevance of this work remains as great as it was when the Quello Center initially proposed to work on net neutrality.

Status: Proposal to Net Institute submitted and rejected, but used to frame a working paper on an empirical evaluation of net neutrality. Working paper on legal and regulatory implications of Open Internet Order submission. Additional work on platform pricing and data caps aimed for revision in September/October. Another paper is being written for a special issue of The Information Society that builds on the lessons we’ve learned regarding the use of NTIA and FCC data on broadband.

3.2.2. Price Discrimination

Price discrimination—the practice of charging different prices to different consumers for the same quality and quantity of a good—is prevalent in a wide variety of economic settings. Such price discrimination can be highly explicit and intentional, resulting when a firm is able to segment a market and price differently according to certain characteristics that distinguish different consumers or consumer groups. It can also arise endogenously as an equilibrium phenomenon when consumers seek to acquire information and firms compete to inform them (i.e., using advertisement).

The Quello Center’s study of price discrimination included two working papers outside its research of net neutrality. The first work explores the use of grandfather clauses that exempt existing consumers from a price increase. These clauses are common in the mobile wireless industry as well as other setting involving ICTs, though their use by firms is unstudied and not fully understood. The second, studies pricing outcomes when firms compete not only on price, but also on advertising to consumers who have limited attention.

Status: Paper on advertising to consumers with limited attention submitted. Paper on grandfather clauses requires additional progress.

3.2.3. Vertical and Horizontal Relationships

Interactions in communications and media industries are often governed by complex relationships between firms. For example, Internet Service Providers are often vertically integrated into content, either through cable service or through direct ownership of “over-the-top” content, while competing against unintegrated content providers. Mobile wireless providers may share parts of their wireless networks and also sign roaming agreements with one another. Incumbent local exchange carriers sell their services to downstream consumers, but also to competitive local exchange carriers that rely on incumbent networks. These varying relationships among competitors have important pricing implications. When the services in question are also regulated, the impact can be both static and dynamic.

The Quello Center engaged in a theoretical research program that evaluates the varying relationships and the impact on them of regulation on economic welfare and investment. In addition to the related aforementioned work on ISP data caps, ongoing work includes studies of joint ventures between competing firms as well as of regulation in the market

for business data services—a space where vertically integrated incumbents sell inputs to and compete with downstream firms.

Status: Paper on joint ventures submitted. Paper on business data services regulation submitted presented at TPRC.

3.3. *Connected and Autonomous Vehicles*

Autonomous vehicles will significantly impact future transportation across the United States and potentially the world. Given the significance to the automotive industry in Michigan, the state is likely to experience the challenges and benefits of this new technological breakthrough in many ways. Working together with Professor Shelia Cotten (Media and Information), Aleks Yankelevich has submitted two grant proposals in this area. The first, now funded by MSU's MAPPR, seeks to understand Michigander expectations and perceptions of autonomous vehicles using Michigan's State of the State Survey. The second seeks to understand how to best prepare the workforce for automation in the mobility space, stemming in part from the arrival of connected and autonomous vehicles.

Status: Aleks is collaborating with Professor Cotten on this work.

3.4. Automation and the Auto Industry (one awarded, two under review)

As discussed above, the Center has recently submitted two grants to conduct research pertaining to autonomous vehicles. In addition, we have also submitted a pre-proposal concerning Internet based retailing in the auto-industry.

The first grant seeks to understand Michigander expectations and perceptions of autonomous vehicles using Michigan's State of the State Survey (SOSS). We hope to learn how attitudes and perceptions concerning automated vehicles differ according to demographics and locations across Michigan, how willing are Michiganders to pay for automated driving technology, what barriers must automakers overcome to induce Michiganders to adopt, and what Michiganders hope for (or concerned with) regarding the future of driving. The grant has been funded by MAPPR for \$25,000, with the bulk going to pay survey expenses. MAPPR has also indicated a willingness to provide an additional \$8,000 for survey expenses if we collaborate with other interested researchers.

The second grant aims to figure out how to best prepare the workforce for automation in the mobility space, stemming from connected and autonomous vehicles. The grant, which was submitted to the American Center for Mobility, seeks to undertake a case study of the automotive and other affected industries, a separate case study of employment impacts, and a study/survey of potentially affected workers. Our aim is to allow policy makers and other stakeholders to optimize the development of workforce development programs to stem the tide of unemployment predicted as a result of automation.

A third pre-proposal was submitted to the MSU-Ford Alliance to conduct research seeking to improve Ford's inventory management and public inventory website in order

to reduce consumer search costs and spur competition between Ford franchisee car dealers.

4. Summary of Grant and Contract Activity

Overall, we have worked on more than 30 proposals over the past three years, with 8 accepted as of December 2017 (Table 1). Three proposals are currently under review by various funding bodies, an additional 2 or 3 proposals will be submitted to the NSF and other funding agencies in 2018. Our targeted success underscores the effort required to pursue funded research in media and information policy and reinforces the value of this effort. Moreover, our two most recent funded projects (Google Follow-On Funding and Rocket Fiber) amount to funding equivalent to the year’s revenue derived from our endowment. In other words, these two grants enabled us to nearly double the impact of the Center by enabling us to hire additional research staff. More generally, the stimulus funding provided by the College that enabled us to hire an Assistant Research Professor and post-doctoral fellow has led to sufficient support to continue this scale of staffing without the stimulus funding. This significantly increases the level of research activity, output, and impact of the Center.

Table 1. Overview of grant proposal submissions and awards

Proposal	Funding Source	Date Requested	Amount Requested	Award	Status
<i>ICTs in the Prisoner Reentry Process</i>	S3	Oct 2017	\$10,000	\$10,000	Awarded
<i>Communication Technologies, Social Tolerance, and Relationship Persistence</i>	NSF	Aug 2017	\$855,268 (over 5 years)	\$118,000 (for 1-year pre-test study)	Partially Awarded (PI: Keith Hampton)
<i>Search & Politics Policy Papers – Follow-on Funding</i>	Google	Aug 2017	\$78,692	\$78,692	Awarded
<i>Preparing Workforce for Automation*</i>	American Center for Mobility (ACM)	July 2017	TBD		Submitted Proposal Upon Request from ACM CIO
<i>Bridging Rural Access Divides (BRAD)*</i>	Merit/Allband/Microsoft/GLN	July 2017	\$69,740		Submitted Proposal Upon Request from Merit Smart Country Project
<i>Digital Policy Issues*</i>	MAPPR	Jun 2017	\$25,000		Rejected; considering in house support
<i>Autonomous Vehicle Perception*</i>	MAPPR	Jun 2017	\$25,000		Awarded (PI: M&I Professor Shelia Cotten;

						Yankelevich as Co-PI)
Net Neutrality Investment Impact*	Net Institute	May 2017	<\$15,000			Rejected
Improving Consumer Shopping Experience*	Ford-MSU Alliance	May 2017				Submitted pre-proposal; awaiting follow-up from Ford
Report on Education Superhighway 2016	Quilt	April 2017	TBD			Awaiting follow-up conversation with Quilt
Rocket Fiber	Rocket Ventures	Apr 2017	\$100,000	\$100,000		Awarded
Knight Foundation Information Excellence Awards	Knight Foundation	Apr 2017	\$50,000			Rejected
Next Generation Hybrid Broadcasting for Smart and Connected Communities*	NSF Smart and Connected Communities solicitation	Feb 2017	\$5,000,000			Rejected
An Internet Portal for Data on Digital Access	NSF RIDIR	Feb 2017	\$565,684			Rejected
Prisoner Rehab-Release	NSF LSS	Jan 2017	\$453,487			Rejected; revision for Aug 2018 NSF cycle
No Student Left Offline	MacArthur	Sep 2016	\$100M	--		MSU Submitted Alternative Project
Search & Politics	Google	Aug 2016	\$205,888	\$205,888		Awarded
Net Neutrality Investment Impact	NSF (Economics)	Aug 2016	\$388,625			Rejected
Reach & Role of Televised Debates and Social Media Presidential Election	MAPPR	June 2016	\$24,900	--		Rejected; being conducted with limited RA support
Business Data Services	Net Institute	May 2016	<\$15,000	--		Rejected
Digital Inequalities at MSU	CIEG	May 2016	\$9,460	--		Rejected; being conducted with limited RA support
5.9 GHz V2P	Ford-MSU Alliance	May 2016		--		Rejected
Infra and Development	Rocket Ventures	Mar 2016	\$149,628	--		5-YR Revise to lower budget, Revision Requested (see April 2017)
Last Mile	Quilt/Merit	Mar 2016	\$53,200	\$53,200		Awarded
Rocket Fiber	Rocket Ventures	Dec 2015	\$20,000	--		Revise & Submit 5-

					YR (see Mar 2016)
Inequalities	NSF (IBSSR)	Nov 2015	\$843,972	--	Rejected
Connectivity	MSU-SPG	Sep 2015	\$381,593	--	Rejected
Detroit Webmetrics	MAPPR	Aug 2015	\$15,000	\$10,000	Awarded
Digital Divides	MAPPR	Aug 2015	\$25,000	\$20,000	Awarded
Connected State of Ohio	Connect Ohio	May 2015	\$45,000	--	Accepted by Connect Ohio, but Failed in Higher Level Review (not Ohio institution!)

4. Recent Publications (* for publications since September 2016)

- ***Dutton, W. H.** (forthcoming). Wired City, pp. forthcoming in Orum, A. M. (ed.), *The Wiley Blackwell Encyclopaedia of Urban and Regional Studies*.
- ***Dutton, W. H.** (In Progress). *The Fifth Estate*. New York: Oxford University Press.
- ***Dutton, W.H.** (2017). Fostering a Cyber Security Mindset. *Internet Policy Review*, 6(1): DOI: 10.14763/2017.1.443 Available at: <https://policyreview.info/node/443/pdf>
- ***Dutton, W. H.** (2017). Fake news, echo chambers and filter bubbles: Underresearched and overhyped. *The Conversation*, 5 May: <https://theconversation.com/fake-news-echo-chambers-and-filter-bubbles-underresearched-and-overhyped-76688>
- ***Dutton, W. H.** (2017). Reflections on Scholarship in the Study of Online News, pp. 81-88 in Boczkowski, P. and Anderson, C. W. (eds), *Remaking Digital News*. Cambridge, MA: MIT Press.
- Dutton, W. H.** (2015). Putting Policy in its Place: The Challenge for Research on Internet Policy and Regulation. *I/S: A Journal of Law and Policy for the Information Society*, 12(1) (Fall): 157-84.
- Dutton, W. H., & Blank, G.** (2015). Cultures on the Internet. *InterMedia*, Winter 2014/15 Vol 42 Issue 4/5: 55-57.
- Dutton, W. H., & Blank, G.** (2015). Cultural Stratification on the Internet: Five Clusters of Values and Beliefs among Users in Britain, pp. 3-28. In: Robinson, L., & Cotten, S. (eds). *New Media Cultures: Communication and Information Technologies Annual*, Vol. 11. Emerald Studies in Media and Communication, Bingley, UK: Emerald Group Publishing Limited.
- Dutton, W. H., & Dubois, E.** (2015). The Fifth Estate: A Rising Force of Pluralistic Accountability, pp. 51-66 in Coleman, S., and Felton, D. (eds). *The Handbook of Digital Politics*. Cheltenham, UK: Edward Elgar.
- ***Dutton, W.H., Hangler, F., and Law, G.** (2017). *Broadening Conceptions of Mobile and Its Social Dynamics*, pp. 142-170 in Chan, J. M., & Lee, L. F. (Eds.), *Advancing Comparative Media and Communication Research*. London: Routledge.

- Dutton, W.H. & Reisdorf, B.C.** (2016). The Internet through the ages. In: Nixon, P.G., Rawal, R. and A. Funk (Eds.). *Digital Media Usage Across the Lifecourse*, pp. 16-28. Surrey: Ashgate.
- ***Dutton, W.H., Reisdorf, B.C.,** Dubois, E., & Blank, G. (2017). *Search and Politics: The Uses and Impacts of Search in Britain, France, Germany, Italy, Poland, Spain, and the United States*. Quello Center Final Report for the project “The Part Played by Search in Shaping Political Opinion”, supported by Google, UK, in collaboration with Google Inc. East Lansing, MI: Michigan State University. Available at: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2960697.
- ***Dutton, W. H., and Reisdorf, B. C.** (2017). Cultural divides and digital inequalities: attitudes shaping Internet and social media divides. *Information, Communication & Society*, 1-21.
- Dutton, W. H.,** Sun, Huan, & Shen, Weiwei. (2015). China and the Fifth Estate: Net Delusion or Democratic Potential?, pp. 1-19. In: Balcells, J., Battle, A., & Padró-Solanet, A. (coord.). *The Impact of Social Media in Politics and Public Administrations (online special issue)*. IDP. Revista de Internet, Derecho y Política. No. 20, pp. 1-19. Available at: <http://elcrps.uoc.edu/index.php/idp/article/view/n20-dutton-huan-shen/2797>.
- *Graham, M., and **Dutton, W. H.** (2014) (eds). *Society and the Internet: How Networks of Information and Communication are Changing our Lives*. Oxford: Oxford University Press. A second revised edition is under review by OUP.
- Grillo, F., **Dutton, W. H.,** & Cobo, C., (2015). Change and Stability in the Economic Geography of Information: The Distribution of Jobs over Time and Across Industries in the Internet Age. *Symphonya: Emerging Issues in Management* (symphonya.unimib.it), n. 1, pp. 44–62.
- Haigh, T., Russell, A. L., & **Dutton, W. H.** (2015). Histories of the Internet. *Information & Culture*, 50(2): 143-59.
- ***Hampton, K.** (2017). Studying the Digital: Directions and Challenges for Digital Methods. *Annual Review of Sociology* 43, 167-188.
- ***Hampton, K.** (2017). New Communication Technologies and the Future of Community. In Paul Messaris and Lee Humphreys (Eds.) *Digital Media: Transformations in Human Communication 2nd ed.* New York: Peter Lang. 127-138.
- ***Hampton, K.,** Inyoung S., and Weixu L. (2017). Social Media and Political Discussion: When Online Presence Silences Offline Conversation. *Information, Communication & Society* 20(7), 1090-1107.
- Helsper, E. J., & **Reisdorf, B. C.** (2016). The emergence of a “digital underclass” in Great Britain and Sweden: Changing reasons for digital exclusion. *New Media & Society*, 1461444816634676.
- Jewkes, Y., & **Reisdorf, B. C.** (2016). A brave new world: The problems and opportunities presented by new media technologies in prisons. *Criminology and Criminal Justice*, 1748895816654953.

- Lloyd, J., Hawton, K., **Dutton, W. H.**, Geddes, J. R., Goodwin, G. M., & Rogers, R. D. (2016). Thoughts and acts of self-harm, and suicidal ideation, in online gamblers. *International Gambling Studies*, 1-16.
- ***Reisdorf, B. C., Dutton, W. H., Triwibowo, W., & Nelson, M. E.** (2017). The unexplored history of operationalising digital divides: a pilot study. *Internet Histories*, 1(1-2), 106-118.
- Reisdorf, B.C.**, & Grosej, D. (2015). Internet (non-) use types and motivational access: Implications for digital inequalities research. *new media & society*, 1461444815621539.
- ***Reisdorf, B.C.** & Grosej, D. (2017). Digital Divides, Usability and Social Inclusion: Evidence from the Field of E-Services in the UK. In: Choudrie J., Kurnia, S. and Tsatsou, P (Eds.). *Innovative ICT enabled Services and Social Inclusion*. London: Routledge.
- Reisdorf, B. C.**, & Jewkes, Y. (2016). (B) Locked sites: cases of Internet use in three British prisons. *Information, Communication & Society*, 19(6), 771-786.
- Shapiro, M.**, Murphy, D., **Yankelevich, A.**, & **Dutton, W. H.** (2016). Wireless Innovation for Last Mile Access: An Analysis of Cases and Business Strategies.
- Sormanen, N. & **Dutton, W.H.** (2015). The Role of Social Media in Societal Change: Cases in Finland of Fifth Estate Activity on Facebook. *Social Media + Society*, July-December: 1–16.
- ***Yankelevich, A., Shapiro, M., & Dutton, W.** (2017). Reaching beyond the wire: challenges facing wireless for the last mile. *Digital Policy, Regulation and Governance*, 19(3).
- ***Yankelevich, A., Shapiro, M., Dutton, W. H.**, & Murphy, D. (2016). Wireless Innovation for Last Mile Access: A Regulatory Analysis.
- Yankelevich, A.** & Vaughan, B. (2016). Price-match announcements in a consumer search duopoly. *Southern Economic Journal*, 82(4), 1186-1211.
- *Weixu, L. & **Hampton, K.** (2017). Beyond the Power of Networks: Differentiating Network Structure from Social Media Affordances for Perceived Social Support. *New Media & Society* 19(6), 861-879.

5. Working Papers and other Published Work

- *Aguelakakis, N., & **Yankelevich, A.** (2017). Collaborate or Consolidate: Assessing the Competitive Effects of Production Joint Ventures. *Available at SSRN 2432916*.
- *Astorne-Figari, C., Lopez, J., & **Yankelevich, A.** (2017). Advertising and Pricing When Attention is Limited. *Available at SSRN 2964298*.
- Bauer, J. M. & **Dutton, W. H.** (2015). The New Cyber Security Agenda: Economic and Social Challenges to a Secure Internet. Joint working paper for the Oxford Global Cybersecurity Project at the Oxford Martin Institute, University of Oxford, and the Quello Center at MSU, based on a briefing document prepared by the authors to

support the World Bank's World Development Report. *Available at SSRN 2614545.*

- *Dutton, W. H.** (2017), 'Fake news, echo chambers and filter bubbles: Underresearched and overhyped', *The Conversation*, 5 May: <https://theconversation.com/fake-news-echo-chambers-and-filter-bubbles-underresearched-and-overhyped-76688>
- Dutton, W. H.** (2016). Mexico in the New Internet World. This text was prepared for delivery at a conference, entitled "Global Mexico: Interests and Principles of Foreign Policy," organized by the Secretary of Foreign Affairs of Mexico and the Center for Research and Teaching in Economics and the Legal Research Institute of the National Autonomous University of Mexico. The conference was held from 2 to 3 May, 2016 at the headquarters of the Ministry of Foreign Affairs in Mexico City. *Available at SSRN 2788392.*
- Dutton, W. H.** (2015). Multistakeholder Governance?. Quello Center Working Paper, based on a briefing document prepared by the author to support the World Bank's World Development Report. East Lansing, MI: Quello Center, Michigan State University. *Available at SSRN 2615596.*
- Farrington, J., Philip, L., Cottrill, C., Abbott, P., Blank, G., & **Dutton, W.H.** (2015). *Two-Speed Britain: Rural Internet Use*. Aberdeen, UK: Aberdeen University Press. *Available at SSRN 2645771.*
- Jeitschko, T., Kim, S.J., & **Yankelevich, A.** (2016). A Cautionary Note on Using Hotelling Models in Platform Markets. *Preliminary manuscript available upon request.*
- *Jeitschko, T., Kim, S.J., & **Yankelevich, A.** (2017). Data Caps, Zero Rating, and Content Market Competition. *Preliminary manuscript available upon request.*
- *Kim, S.J., Ukhaneva, O., & **Yankelevich, A.** (2017). The Impact of Net Neutrality on Investment for Last Mile Broadband. *Preliminary manuscript available upon request.*
- Koning, K. J., & **Yankelevich, A.** (2016). An Abridged History of Open Internet Regulation and its Policy Implications. *Available at SSRN 2797366.*
- *Nayeem, O., & **Yankelevich, A.** (2017). Price-Cap Regulation of Firms That Supply Their Rivals. *Available at SSRN 2943137.*
- Park, S., Middleton, C., Oostveen, A.-M., & **Reisdorf, B.C.** (2016). Building digital capacity in rural communities: Digital inclusion policies in Australia, Canada, UK and US. *Preliminary manuscript available upon request.*
- ***Reisdorf, B.C.**, & Rikard, R.V. (under review). Digital Rehabilitation: A Model of Reentry into the Digital Age. *American Behavioral Scientist*. *Available on request.*
- ***Reisdorf, B.C.**, **Triwibowo, W.**, & **Yankelevich, A.** (2017). Digital inequalities in Higher Education. *In preparation for American Behavioral Scientist, Special Issue on Education and Technology*. *Available on request.*

*Rhinesmith, C., & **Reisdorf, B.C.** (under review). Race and Digital Inequalities: Policy Implications. *Under review at New Media & Society. Available on request.*

***Shillair, R., & Dutton, W. H.** (2016). Instilling a Security Mindset. *Available at SSRN 2756736.* Under revision for submission to an academic journal.

UNESCO (2015). Keystones to Foster Inclusive Knowledge Societies: Access to Information and Knowledge, Freedom of Expression, Privacy, and Ethics on a Global Internet. Draft of results of UNESCO Internet Study for Discussion at CONNECTING the Dots Conference, UNESCO Headquarters, Paris, France, 3-4 March. Drafted by Bill Dutton. Available in eight languages. Available at: <http://unesdoc.unesco.org/images/0023/002325/232563E.pdf>

Vaughan, B., & **Yankelevich, A.** (2015). Consumer Complacency and Grandfather Clauses. *Available at SSRN 2684556.*

***Yankelevich, A., Reisdorf, B.C., & Dutton, W.H., and Shapiro, M.** (2017). Wirelessly Bridging the Homework Gap: Challenges in Getting Broadband to Disconnected Students. A Quello Working Paper, submitted to an academic journal.

6. Recent and Upcoming Presentations and Talks

20-21 Apr 2018 Invited talk at *Know News: Engaging with Mis- and Disinformation Symposium*, Simmons College, Boston, MA, USA, B.C. Reisdorf

29 Nov 2017 The Quello Center hosted a discussion advancing policy and governance as a College-wide focus area:
<http://quello.msu.edu/media-communication-research-and-policy-panel/>

27-28 Nov 2017 Invited speaker, 'Fake News, Echo Chambers, and Filter Bubbles in the Ecosystem of Political Information' for the Spain's Internet Governance Forum, with additional talks at the Alternativas Foundation, the General Secretary of the Ministry of Justice and Deputy Director of Legislation, the Deputy Director for Digital Content of the Ministry of Digital Agenda, and the Deputy Director of the Cabinet of the Vice President of the Government, Madrid, Spain, 27-28 November 2017. Dutton.

Nov 2017 "Persistent and Pervasive Community: How Social Media Maybe Transforming Our Relations and Democracy." Conference on Social Ties and Citizenship: Interactions and Social Cohesion (COES 2017). Universidad Adolfo Ibáñez in Viña del Mar, Chile. Keynote address: K. Hampton

"Participación democrática y nuevas tecnologías de comunicación. Aspectos sustantivos y metodológicos" (Democratic participation and new communication technologies, substantive and

- methodological aspects). Institute of Advanced Studies (IDEA). University of Santiago, Chile; Invited talk: K. Hampton
- “New Communication Technologies and the Future of Community.” Institute of Sociology. Pontifical Catholic University of Chile, Santiago, Chile; Invited talk: K. Hampton
- 26 Oct 2017 Invited keynote for a journalism summit, entitled ‘Media and the Machines: The Future of Journalism’, on the findings of the Quello Search Project, Munich, Germany, 26 October 2017. Dutton
- 25 Oct 2017 Invited speaker on the Quello Search Project for a workshop at Bruegel, a think tank in Brussels, that is focused on fake news and filter bubbles. Prior to this workshop, Bill met with DG Connect Unit, which is in charge of Fake News for the European Commission. After the workshop, he will meet with colleagues (MEPs, policy advisors, EP research department staff) working on the EU’s Digital Single Market project, Brussels, Belgium, 25 October 2017. Dutton
- 20 Oct 2017 “Internet Activity, Skills and Political Opinion Formation,” Invited talk at Harvard Kennedy School, Cambridge, MA, USA B.C. Reisdorf
- 15 Sep 2017 Invited keynote, ‘The part played by search in shaping public opinion’ at a conference entitled Emerging Media: Connection, Innovation, Transformation, School of New Media, Peking University, Beijing China, 15 September 2017. Dutton
- 8-9 Sep 2017 TPRC The 45th Research Conference on Communications, Information, and Internet Policy, Arlington:
- “A Cross-National Survey of Search and Politics,” W.H. Dutton, B.C. Reisdorf (presenter), G. Blank, and E. Dubois
- “The Intersectionality of Digital Inequality and its Policy Implications,” C.H. Rhinesmith (presenter) and B.C. Reisdorf
- “Price-Cap Regulation of Firms That Supply Their Rivals,” O. Nayeem and A. Yankelevich (presenter)
- Dutton, W. H.**, Creese, S., **Shillair, R.** (presenter), Bada, M., Roberts, T. (2017), Cyber Security Capacity: Does it Matter? Paper presented at the Annual Meeting of the Telecommunication Policy Research Conference (TPRC), held at George Mason University, September 8 & 9.
- 7 Sep 2017 “Race and Digital Inequalities: Policy Implications,” Presentation at TPRC Capitol Hill Briefing, Invited Speaker, B.C. Reisdorf & C. Rhinesmith
- 8-9 Aug 2016 59th Annual Regulatory Studies Program ‘Camp NARUC’, sponsored by the Institute of Public Utilities at Michigan State University, Kellogg Conference Center: “Wither Net Neutrality?” “Delivering Universal Broadband,” and “The FCC Rulemaking

- Process,” Invited Speaker, A. Yankelevich; “Universal Broadband,” Invited Speaker, B.C. Reisdorf
- 28 Jul 2017 Dutton presented on search and politics project to a workshop on Trust in News and Information in the Digital Age at the Social Media and Society Conference, Toronto, Canada, 28 July 2017
- 13 Jul 2017 Invited speaker, ‘The Part Played by Search in Shaping Public Opinion’, a seminar at The Alexander von Humboldt Institute for Internet and Society (HIIG), Berlin, and was able to meet at the Ministry for Culture with representatives of the state media authorities, representing the German Lander, 13 July 2017. Dutton
- 12 Jul 2017 Invited speaker, ‘The Part Played by Search in Shaping Public Opinion’, for a roundtable at the Centro Studi Americani – the Center for American Studies. That evening, Bill spoke on the Terrazza dei Cesari with members of YouTrend, an organization of political communicators in Italy, which was picked up by over a thousand on a [Facebook Live video stream](#), Rome, Italy, 12 July 2017. Dutton
- 11 Jul 2017 Invited speaker, ‘The Politics of Search in the Aftermath of Trump Election’ at Sciences Po CEVIPOF & Médialab, Paris, France, 11 July 2017. While in Paris on the 10th and 11th, in addition to this lecture, Bill also did invited talks at a UNESCO Knowledge Café for a seminar chaired by the Director for Freedom of Expression and Media Development. He also met with members of the French Audio Visual Regulator, the Conseil Supérieur de l’Audiovisuel (CSA); and then members of the Ministère de la Culture (Ministry of Culture); and met over lunch with a former colleague in the President’s office at the French National Commission on Informatics and Liberty (CNIL), which is central to data protection in France. Dutton
- 10 Jul 2017 Dutton presented work on search and politics project for UNESCO at its Knowledge Café, and met with the French Audiovisual Regulator, CSA.
- 16 Jun 2017 Presentation in London on the Quello Search Project, Bill Dutton.
- 29 May 2017 International Communication Association, San Diego, CA:
 “Cultural Divides and Digital Inequalities—Attitudes Shaping Internet and Social Media Divides”, W.H. Dutton & B.C. Reisdorf
 “A History of Operationalizing Digital Divides”, B.C. Reisdorf & W. H. Dutton
 “Searching About Safety—Exploring the Information Search Process in the Digital Safety Realm” & “The Role of Habits and Prior Experience in Motivating User Cybersecurity Behavior”, R. Shillair & W.H. Dutton

- May 2017 “The Spiral of Silence in Social Media.” Kreativität, Tatkraft und Mut, Colloquium zu Ehren von Elisabeth Noelle-Neumann aus Anlass der 100 (Colloquium in honor of Elisabeth Noelle-Neumann’s 100th anniversary of her birthday). Wiederkehr ihres Geburtstags Institut für Publizistik der Johannes Gutenberg-Universität Mainz and the Institut für Demoskopie Allensbach, University of Mainz, Germany; Keynote address: K. Hampton
- 2 May 2017 Bibi Reisdorf presented initial results from the “Search and Politics” study at the Hans-Bredow-Institut, University of Hamburg
- 9 Apr 2017 “Price-Cap Regulation of Firms That Supply Their Rivals” submitted by Aleks Yankelevich to the International Industrial Organization Conference, but presented by co-author upon request of FCC.
- Apr 2017 “Digital Methods for Studying Community: New Directions in Urban Research,” Department of Sociology, University of Michigan, Ann Arbor, MI; Invited talk: K. Hampton
- Mar 2017 “Persistent and Pervasive: The Changing Structure of Community.” Department of Counseling, Educational Psychology and Special Education, College of Education, Michigan State University, East Lansing, MI; Invited talk K. Hampton
- 9 Mar 2017 William Dutton presented an invited lecture on ‘Political Transformations in Network Societies: The Internet, Power Shifts, and the Fifth Estate’ at the ISCTE - University Institute of Lisbon (ISCTE-IUL), Portugal on 9 March 2017.
- 8 Feb 2017 Aleksandr Yankelevich moderated a panel on the WILMA project at the 2017 Winter Member Meeting of the Quilt
- 8 Feb 2017 Dutton was invited speaker, ‘Capacity Matters’ as part of a panel on Insights into Cybersecurity Data Analysis, Global Cyber Security Capacity Centre Annual Conference, Oxford Martin School, 8 February 2017.
- 19-21 Nov 2016 Southern Economic Association, 86th Meeting, Washington DC: “An Evocative Theory of Limited Attention”, A. Yankelevich
- 11 Nov 2016 William Dutton presented an invited keynote lecture on “Power Shifts in the Network Society: The Rise of the Fifth Estate” at the Melbourne Networked Society Institute’s Conference at The University of Melbourne, Victoria, Australia
- 10 Nov 2016 William Dutton was an invited speaker on ‘Cultural Divides and Digital Inequalities’, for a special seminar at the University of Melbourne, and the Melbourne Networked Society Institute.
- 10-13 Nov 2016 National Communication Association, 102nd Convention, Philadelphia: “The changing character of digital divides: Shifts in the United States, Michigan, and Detroit”, B.C. Reisdorf, W. Triwibowo, M. Nelson, W.H. Dutton

- 26 Oct 2016 Michigan State University Department of Economics, Theory Brown Bag: "Partial Integration and Regulation in Media and Telecomm," A. Yankelevich
- 7 Oct 2016 William Dutton was an invited speaker on "ICT4Detroit: The Role of ICTs in Collaboration for Detroit", for a workshop on Civic Technology and Urban Informatics, University of Michigan, Ann Arbor.
- 5 Oct 2016 Professor Christine Borgman, UCLA's Presidential Chair, delivered a Quello Lecture at Michigan State University
- 5-8 Oct 2016 Association of Internet Researchers, IR17, Berlin, Germany: "An interrupted history of digital divides", B.C. Reisdorf, W. Triwibowo, M. Nelson, W.H. Dutton
- 30 Sep/1 Oct 2016 TPRC The 44th Research Conference on Communications, Information, and Internet Policy, Arlington:
 "Cultural Divides and Digital Inequalities: Attitudes Shaping Internet and Social Media Divides", W.H. Dutton & B.C. Reisdorf
 "Supporting a Cybersecurity Mindset", R. Shillair & W.H. Dutton
 Panel: "Digital inclusion in urban America", W.H. Dutton
 Panel: "Rural Broadband Policies in a Cross-National Comparison", B.C. Reisdorf
- 16 Aug 2016 58th Annual Regulatory Studies Program 'Camp NARUC', sponsored by the Institute of Public Utilities at Michigan State University, Kellogg Conference Center: "The FCC Rulemaking Process", Invited Speaker, A. Yankelevich
- 16 Aug 2016 58th Annual Regulatory Studies Program 'Camp NARUC', sponsored by the Institute of Public Utilities at Michigan State University, Kellogg Conference Center: "Network Neutrality, Internet Regulation, and the Future of the Media", Invited Speaker, W.H. Dutton; along with additional talks by Johannes Bauer and Aleks Yankelevich
- 25-31 Jul 2016 International Association for Media and Communication Research, Leicester, UK: "The (digitally) forgotten: Digital exclusion of UK prisoners", B.C. Reisdorf
- 9-13 Jun 2016 International Communication Association, Fukuoka, Japan: "Innovations in Digital Inclusion Research, Policy and Practice" Blue Sky Workshop, W.H. Dutton, B.C. Reisdorf; "Power Shifts and The Fifth Estate", ICA Fellows Talk by Bill Dutton
- 19 May 2016 National Taiwan University, Taipei, Taiwan: "Collaborate or Consolidate: Assessing the Competitive Effects of Production Joint Ventures", A. Yankelevich

- 14 Mar 2016 Graduate School of Library and Information Science, University of Illinois at Urbana-Champaign: "Power Shifts and the Rise of a Fifth Estate", Windsor Lecture, W.H. Dutton
- 3 Mar 2016 Michigan State University Department of Economics, Theory Brown Bag "An Evocative Theory of Limited Attention", A. Yankelevich
- 11 Feb 2016 Department of Radio, and a Television and Film (RTF) Colloquium, University of Texas, Austin: "Putting Policy in its Place", Technology and Information Policy Institute (TIPI) Speaker Series, Invited Speaker, W.H. Dutton
- 26 Jan 2016 Michigan State University Quello Center: "What is 'Special Access' and Why is It So Important?", A. Yankelevich
- 3 Dec 2015 Cybersecurity Seminar, Telecommunications Association of Michigan, Kellogg Center, MSU, East Lansing, MI: "Issues Arising Around Cybersecurity", Invited Speaker, W.H. Dutton
- 21-23 Nov 2015 Southern Economic Association, 85th Meeting, New Orleans, LA: "Price Caps in the Market for Special Access", A. Yankelevich
- 13 Nov 2015 Rob Kling Center of Social Informatics and the Department of Informatics and Library Science, School of Informatics and Computing, Indiana University, Bloomington: "Power Shift: Rise of the Internet and a Fifth Estate", Invited speaker, W.H. Dutton
- 5 Nov 2015 Oxford Internet Institute, University of Oxford, Oxford, UK: "Fireside Chat", a conversation and interview with faculty and students, Invited speaker, W.H. Dutton
- 29 Oct 2015 Video conferencing for several hundred students of the Free Journalism School, Kiev, Ukraine: "Why Journalism Needs the Fifth Estate: Networked Individuals in the War for Information", Invited speaker, W.H. Dutton
- 16 Oct 2015 School of Communication, and Institute for Creativity, Hong Kong Baptist University, Hong Kong, China: "The Internet's Fifth Estate: Net Delusion or Democratic Potential", a seminar for faculty, students & guests, Invited speaker, W.H. Dutton
- 15 Oct 2015 School of Communication, and Institute for Creativity, Hong Kong Baptist University, Hong Kong, China: "Keystones to Foster Inclusive Knowledge Societies", Invited keynote, W.H. Dutton
- 31 Aug 2015 Technical University of Denmark (DTU), Business, Copenhagen, Denmark: "The Internet's Fifth Estate: a New Business Reality", Invited speaker, W.H. Dutton
- 19 Aug 2015 Annual Regulatory Studies Program, Institute of Public Utilities, Kellogg Center, Michigan State University: "Net Neutrality", Invited speaker, W.H. Dutton

- 5 Aug 2015 Presentation delivered by video conferencing to faculty and students of Nelson Mandela Metropolitan University, Port Elizabeth, South Africa: “Challenges for Internet Research: Cybersecurity and Internet Governance”, Invited speaker, W.H. Dutton
- 27-29 Jul 2015 Social Media & Society: 2015 International Conference, 27-29 July, Ryerson University, Toronto, Canada: “Society Meets Social Media: Canaries at the Coal Face of the Internet”, Invited keynote lecture, W.H. Dutton
- 25-29 May 2015 WSIS 2015 Conference at the ITU, Geneva, Switzerland: “WSIS C9. Media: Free, Independent and Pluralistic Media at the Heart of Post-2015 Development Agenda”, Invited panelist, W.H. Dutton [Also spoke on the concluding session of the Conference]
- 24 Apr 2015 ‘Internet Governance in Latin America: Between Borderless Governance and National Initiatives’, University of San Andrés, Buenos Aires, Brasil: “Multistakeholder Internet Governance?”, presentation for Invited speaker, W.H. Dutton
- 11 Apr 2015 ‘Remaking (Digital) News’ Symposium, Northwestern University: “Reflections on Scholarship on Online News”, Invited Respondent, W.H. Dutton
- 27 Mar 2015 ‘The Future of Internet Regulation, Symposium organized by I/S and the Moritz College of Law, The Ohio State University: “Putting Policy in its Place”, Closing Address, W.H. Dutton

7. The Quello Research Team

7.1. Core Staff of the Center

Bill Dutton, the Director of the Center, is joined by core researchers, which include Bibi Reisdorf, a sociologist presently serving as Assistant Director of the Quello Center, and Assistant Professor in the Department of Media and Information; and Dr. Laleah Fernandez, a post-doctoral research fellow at the Quello Center.

7.2. Quello Advisory Board

Marjory S. Blumenthal, Executive Director President’s Council of Advisors on Science and Technology (PCAST)

Christine Borgman, Professor and Presidential Chair, UCLA

Roderick S. Coy, Clark Hill, PLC

Vincent Curren, Principal of Breakthrough Public Media Consulting, Inc.

Prabu David, Dean of the College of Communication Arts & Sciences, MSU

Alyssa Harvey Dawson, the General Counsel at Sidewalk Labs, a company of Alphabet

Laura DeNardis, Professor, School of Communication, American University

David L. Donovan, President and Executive Director, New York State Broadcasters Association, Inc.

John D. Evans, Chairman and CEO, Evans Telecommunications Co. and The John D. Evans Foundation

Brian F. Fontes (Chair), CEO for the National Emergency Number Association

Richard D. McLellan, Attorney, Chair of the Michigan Law Revision Commission and a Trustee of the MSU College of Law

Michael R. Nelson, Public Policy, CloudFlare and Adjunct Professor, Internet Studies CCT Program, Georgetown University

Eli M. Noam, Professor of Economics and Finance at the Columbia Business School

Robert Pepper, Global Connectivity and Technology Policy at Facebook

Karole White, President/CEO of the Michigan Association of Broadcasters

Steve Wildman, Professor Emeritus & J. H. Quello Chair of Telecommunication Studies Emeritus

Richard E. Wiley, Chairman of Wiley Rein LLP

7.3. Quello Research Fellows

Johannes Bauer, Professor in Media and Information, MSU

David Ewoldsen, Professor in Media and Information, MSU

Keith Hampton, Professor in Media and Information, MSU

Natascha Just, Associate Professor in Media and Information, MSU

Taiquan 'Winson' Peng, Associate Professor in Communication, MSU

Nancy Rhodes, Professor in Advertising and Public Relations, MSU

7.4. Other Quello Research Associates

Adam Candeub, Professor, College of Law, MSU

Thomas Jeitschko, Professor, Economics, and the Associate Dean for Graduate Education in the College of Social Science at MSU

Gary Reid, Distinguished Senior Academic Specialist, WDBM-FM Station Manager

A. Michael Noll, Emeritus Professor, Annenberg School for Communication at USC

R.V. Rikard, Postdoctoral Research Associate in the Department of Media and Information

Charles Steinfeld, Professor, Department of Media and Information

Aleksandr Yankelevich, Associate Director of the Brandmeyer Center for Applied Economics, Kansas University, School of Business

7.5. Supporting Research Staff and Graduate Research Assistants

In addition to these staff, the Quello Center benefits from the engagement of a number of MSU graduate students and part-time research assistants.

Ruth Shillair, an MSU doctoral candidate, is supporting Bill Dutton on cyber security research.

Lauren Lincoln-Chevez, an independent archivist, helped the Center with the Quello digital collection.

Craig Robertson, an MI graduate student, is involved with the Google-supported project on The Role of Search in Shaping Political Opinion, and the Debate Study.

Julia DeCook, an MSU graduate student is assisting with interviews and focus groups on the ICTs and Reentry project.

For more information about the larger team of researchers and research associates, see: <http://quello.msu.edu/people/research-squad/>