



REPORT TO MIAPPA | SUMMER 2016

SAFER | SIMPLER | LOWER-COST | LONGER-LASTING

@StandardsUMich

- ## DISCIPLINE
- With assertive, streaming advocacy in regulatory spaces that determine #TotalCostofOwnership we seed balance sheets with value-add possibilities that make Michigan education facilities safer, simpler, lower-cost and longer-lasting.
 - We focus advocacy on the first and running costs of the *user/owner/final fiduciary* — a term of art we use to describe the point of view of the stakeholder who is financially responsible for reconciling the competing requirements of safety and economy in all risk dimensions.
 - We apply our integration competency to fill a gap that is widening — a space too technical in its demands for policy experts and too political in its demands for technical experts. Mastery of this gap — widening as #SmartCampus and Internet of Things concepts roll through Michigan campuses — requires a demonstrated tradition of technical and political success.
 - The discipline of streaming advocacy in global standards requires @StandardsUMich to be always on; always collaborating. During 2015 we hosted over 400 teleconferences with over 1000 views on our YouTube channel of video recordings of these collaborations during 2015. Every Wednesday morning at 11:00 AM ET we host Open Office Hours to discuss any issue.
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- ## SPEED
- Real-time regulation requires real time advocacy in more dimensions globally. E-government is accelerating either directly through federal agencies or through state and local incorporation by reference of ANSI standards or open source foundations.
 - The graphic provides a high-level view of regulatory tracking activity across fifteen disciplines. Tracking an issue in the regulatory stream means we have identified the concept as affecting the education facilities industry's safety and sustainability agenda. We tracked 269 more issues in 2015 than in 2014 and are tooled up to track twice this amount in 2016.
 - The business model of regulatory product developers is changing, some of it owed to political resistance to incorporation by reference, most of it owed to the acceleration of adaptations needed by the ANSI federation to ensure the integrity of voluntary consensus standards.
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- ## RESULTS
- Our 2015 results span a continuum of a few disruptive “code wins” to “lesser wins” that clear up ambiguities in code application and/or enforcement and hasten the cultural change needed for Michigan educational institutions to fully realize the avoided cost opportunities we have secured.
- Continued success reducing excess power chain design capacity mandated in Article 220 of the 2017 National Electrical Code (NEC).
 - The launch of an NFPA research project — co-funded by MIAPPA and eight other universities — that will likely deliver results that will scale up the disruption of NEC Article 220 thereby increasing electrical safety and reducing material and energy waste.

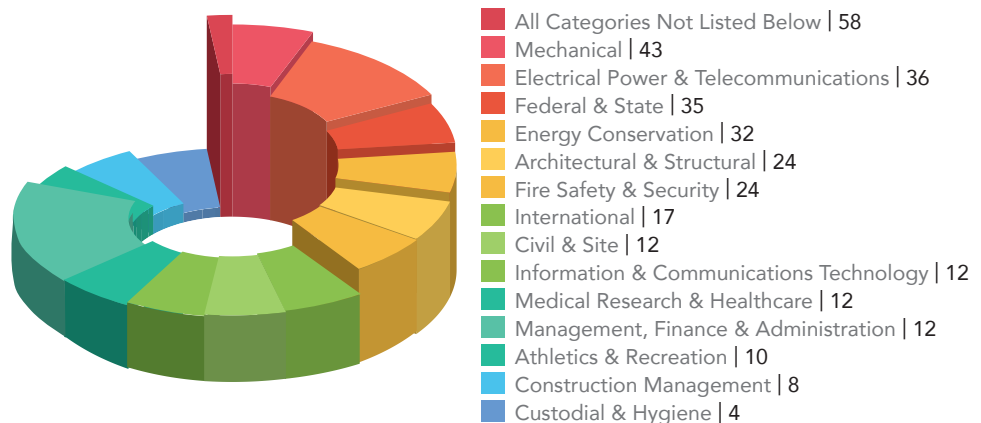
INNOVATION AND REGULATION IS THE SOCIAL NEGOTIATION OF TECHNICAL CHANGE

- Driving two words in Section 110.5 of the 2017 NEC — “Conductors normally used to carry current shall be of copper or aluminum...” an undertaking 9 years in the making — should encourage specification of aluminum wiring for feeder circuits in buildings. Aluminum costs 2/3rds less than copper and not only significantly lowers wiring costs but presents opportunities for increasing power system reliability and lowering greenhouse gas emissions.
- Rolling back what we see as “green over-reach” by incumbent interests who; if left unchecked, will make markets for building control devices by mandating overspecification of temperature and carbon dioxide sensors that have relatively little environmental value and no prospect of a reasonable payback.
- Rolling back mandated overspecification of lighting controls for the same reason.
- Two trade associations whose accreditation as American national standards developers was catalyzed by the University of Michigan — APPA and the Simon Institute — were formally recognized by the American National Standards Institute during 2015. The Simon Institute will have several ANSI standards for the custodial disciplines before the end of 2016.
- Collaboration with Michigan State University on coordinating a regular presence at all of the building construction divisions of the State of Michigan Department of Licensing and Regulation has resulted in invitations to all Michigan colleges and universities to join advisory boards that determine how nationally developed codes and standards are adopted by the State of Michigan.

@StandardsUMich
sets the standard
for streaming
#TotalCostofOwnership
advocacy for
#SmartCampus
infrastructure

Details on these results are available at: <http://standards.plantops.umich.edu/>

BY THE NUMBERS: 339



2016 GOALS

Accelerate the idea pipeline. With our appointment to the new NFPA Facilities User Council we will expand of collaboration with trade associations. We invite our colleagues to listen to our audiocasts of our goals and progress toward them.



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