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Tutorial Video Series: Using Stakeholder Outreach to Increase Usage of ToxCast Data

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Overview: Developing an Informative Tutorial Series

The limited amount of toxicity data on thousands of chemicals found in consumer products has led to the development of research endeavors such as the U.S. EPA's Toxicity Forecaster (ToxCast). ToxCast uses high-throughput screening technology to evaluate thousands of chemicals for potential toxicity. At the end of 2013, U.S. EPA released ToxCast chemical data on almost 2,000 chemicals through the interactive Chemical Safety for Sustainability (iCSS) Dashboard. The iCSS Dashboard provides public access to the high-throughput screening data that can be used to inform the evaluation of the safety of chemicals. U.S. EPA recognized early in the development of ToxCast that stakeholder outreach was needed in order to translate the complex scientific information featured in the iCSS Dashboard and data, with the goal of educating the diverse user community through targeted efforts to increase data usage and analysis. Through survey feedback and the request of stakeholders, a series of tutorial videos to demonstrate to access and use the data has been planned, and the first video of the series has been released to guide data usage. This stakeholder-outreach approach is an ongoing effort that has improved public access, understanding, and usability of the iCSS Dashboard and ToxCast data. This poster describes the video tutorial strategy including an overview of:

- Stakeholder outreach goals and approach
- Overview of Survey Feedback
- Planning, production, and dissemination of tutorial videos
- Overview of tutorial video usage statistics and usage of the ToxCast data

Stakeholder Feedback Incorporated into Approach

January Workshop: 85 Participants

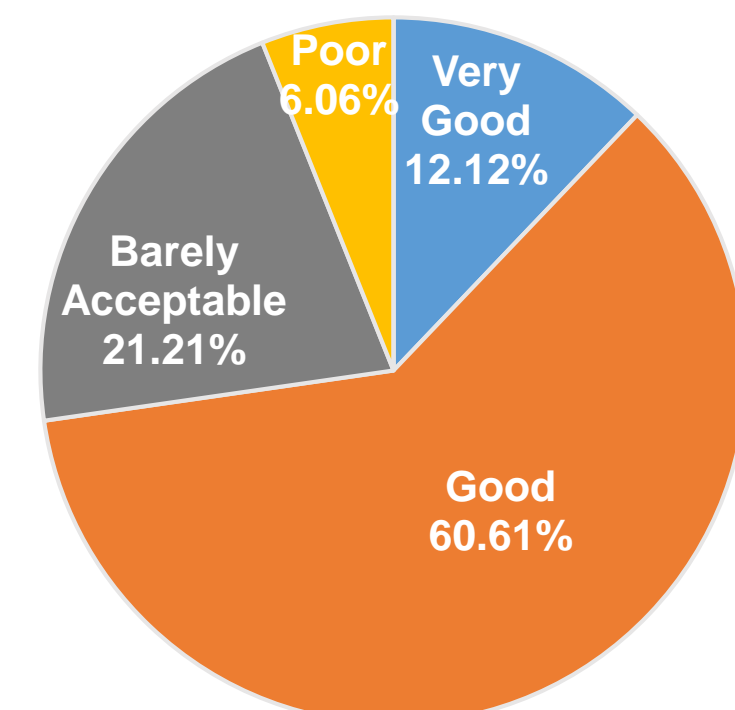
April Workshop: 277 Participants

September Data Summit: 304 Participants

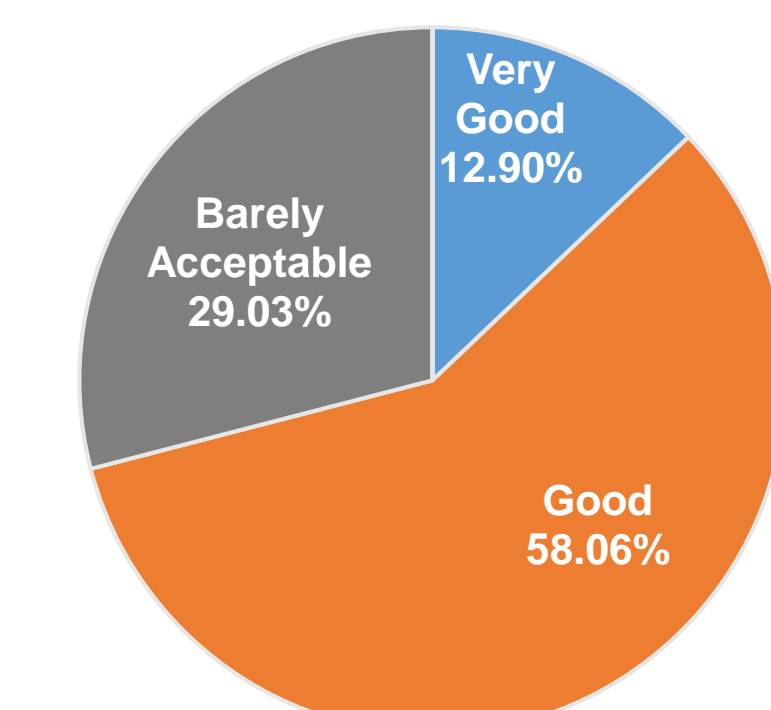
Participants represent: Academia, Consultant/Contractor, Program Office, EPA Researchers, Other US Fed Gov't, Industry, International Gov't, Media, NGO, State Environmental Agency

Results from Data Summit Survey*: 21 Complete Responses

Rating of Usability of the iCSS Dashboard



Rating of Quality of the data for subsequent analysis:



*Tutorial video released 9/11/14 and the Data Summit was 9/29-30/14; the Data Summit feedback is used below with the assumption that the video had not yet been viewed in the small window of time since the video release.

Planning, Production, and Dissemination

Planning

- Gather Stakeholder feedback from Workshop and Data Summit Surveys
- Draft Plan for Tutorial Series
- Draft Script for Video 1: iCSS Dashboard Tutorial

Production

- Record draft of video
- Receive and incorporate feedback from NCCT
- Receive NCCT approval
- Review for public release

Dissemination

- Publish final video
- Post to EPA YouTube, add link to iCSS Dashboard
- Announce video at Data Summit, Communities of Practice Meetings, and through other communications efforts

Production

Production Task	Production Tools
Screencasting and Editing Software	Camtasia Version 8
Graphics	Adobe Illustrator, Photoshop
Audio Recording and Narration	Rode Microphone

Table 1: Tools used for video production

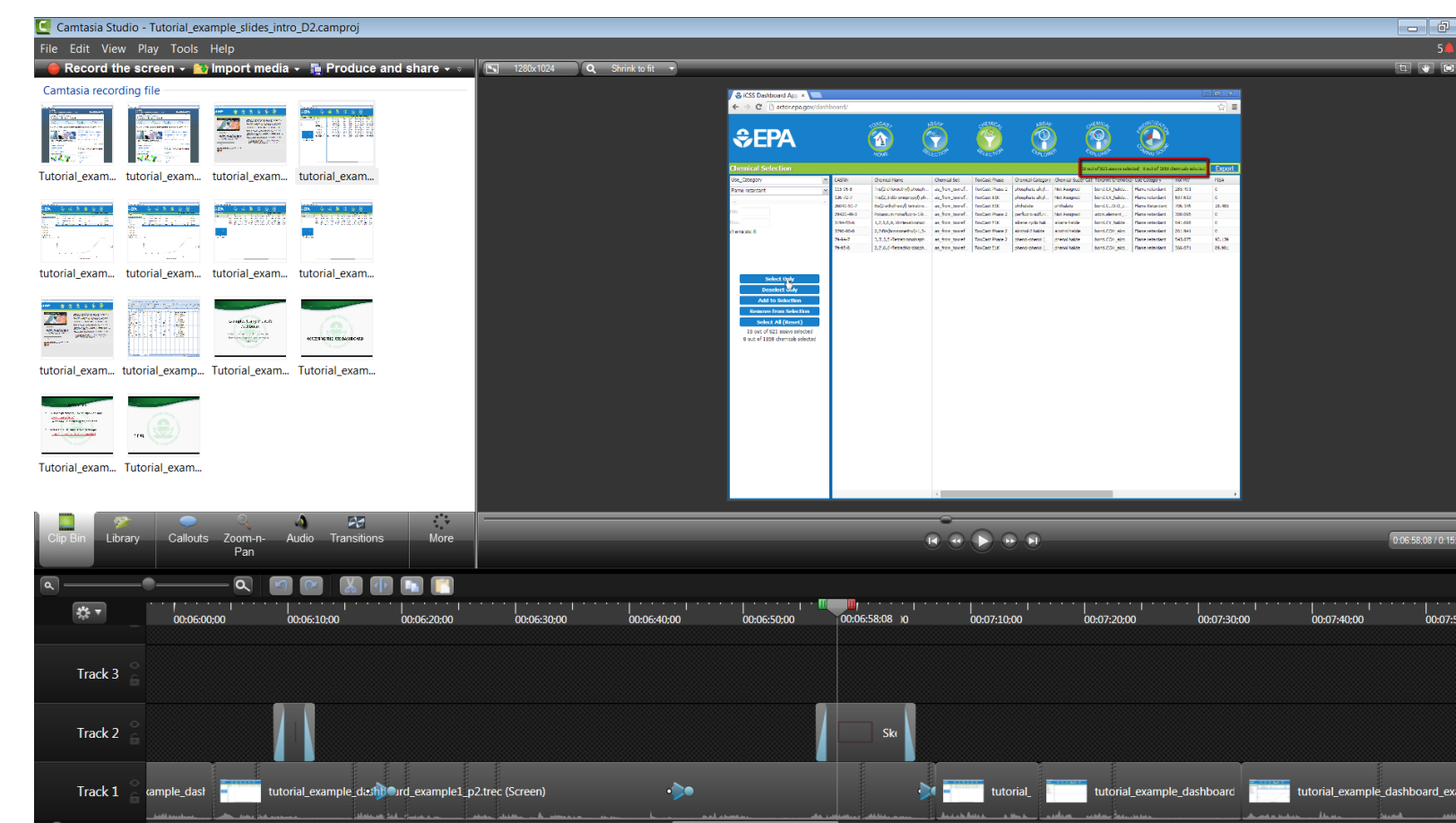


Figure 1A Screenshot of Camtasia in use to weave together audio narration and screencast video recorded from a user interacting with the iCSS Dashboard.

Dissemination



Figure 1B Screenshot of the iCSS Dashboard with the Tutorial Video linked on the home page.

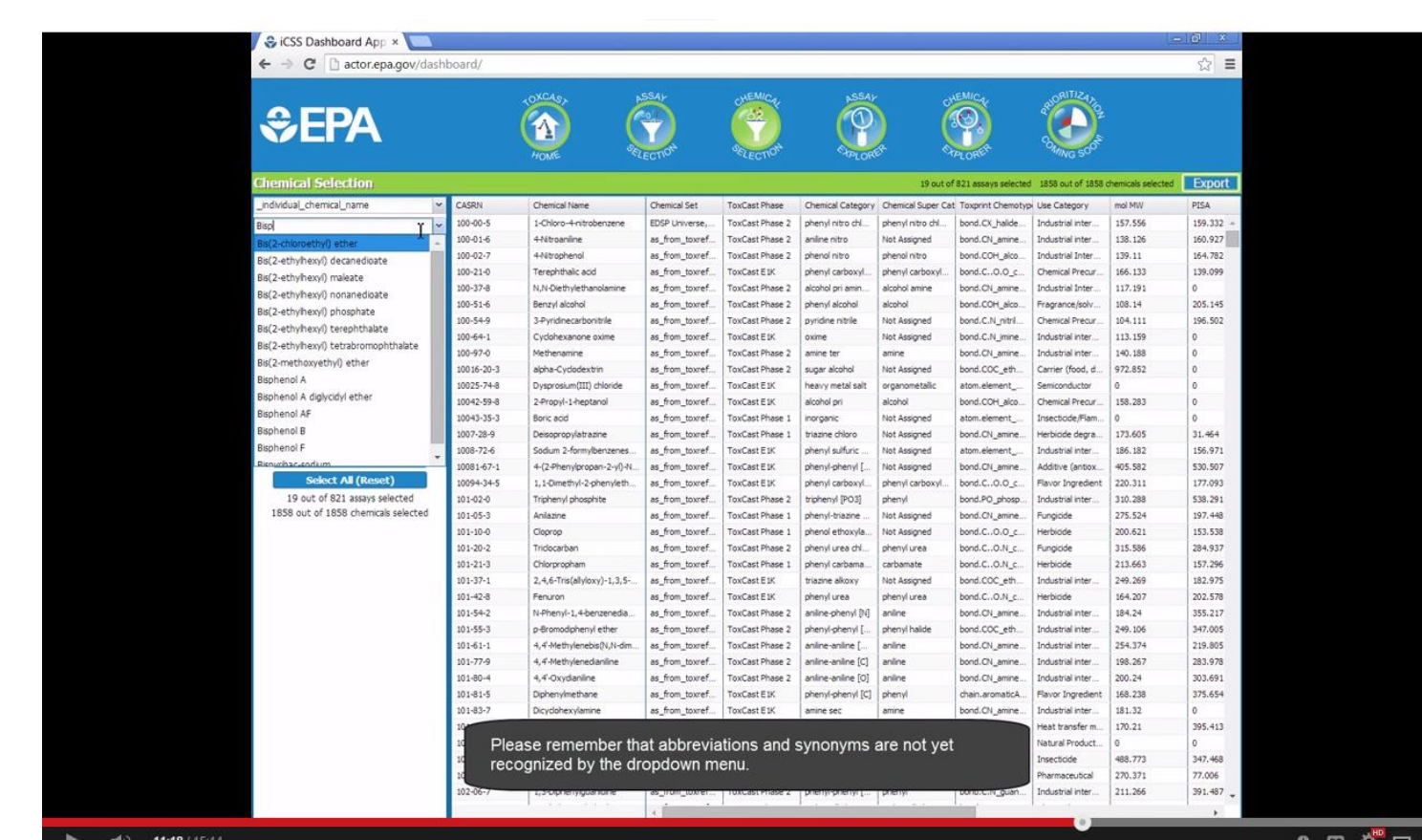


Figure 1C Video screenshot example of pop-up notes included throughout video highlighting iCSS Dashboard functionality tips and other resources available

Impact: Tutorial Video Increased ToxCast Data Usage

The impact of the video tutorial, and other communication efforts, is measured by:

- Increasing tutorial video views
- Increasing visits to ACToR (portal to get to iCSS Dashboard)
- Increasing visits to ToxCast Data Download Page

Impact is also seen through EPA's compilation and response to stakeholder feedback including:

- New iCSS Dashboard interface to address use and functionality feedback
- New Data Pipeline with improved data processing for ToxCast data
- Suggestions for topics and improvements to Tutorial Videos



Figure 2A Since the release of the first video tutorial of the series on the iCSS Dashboard in September 2014, there have been 286 views (as of March 2015) of this video.

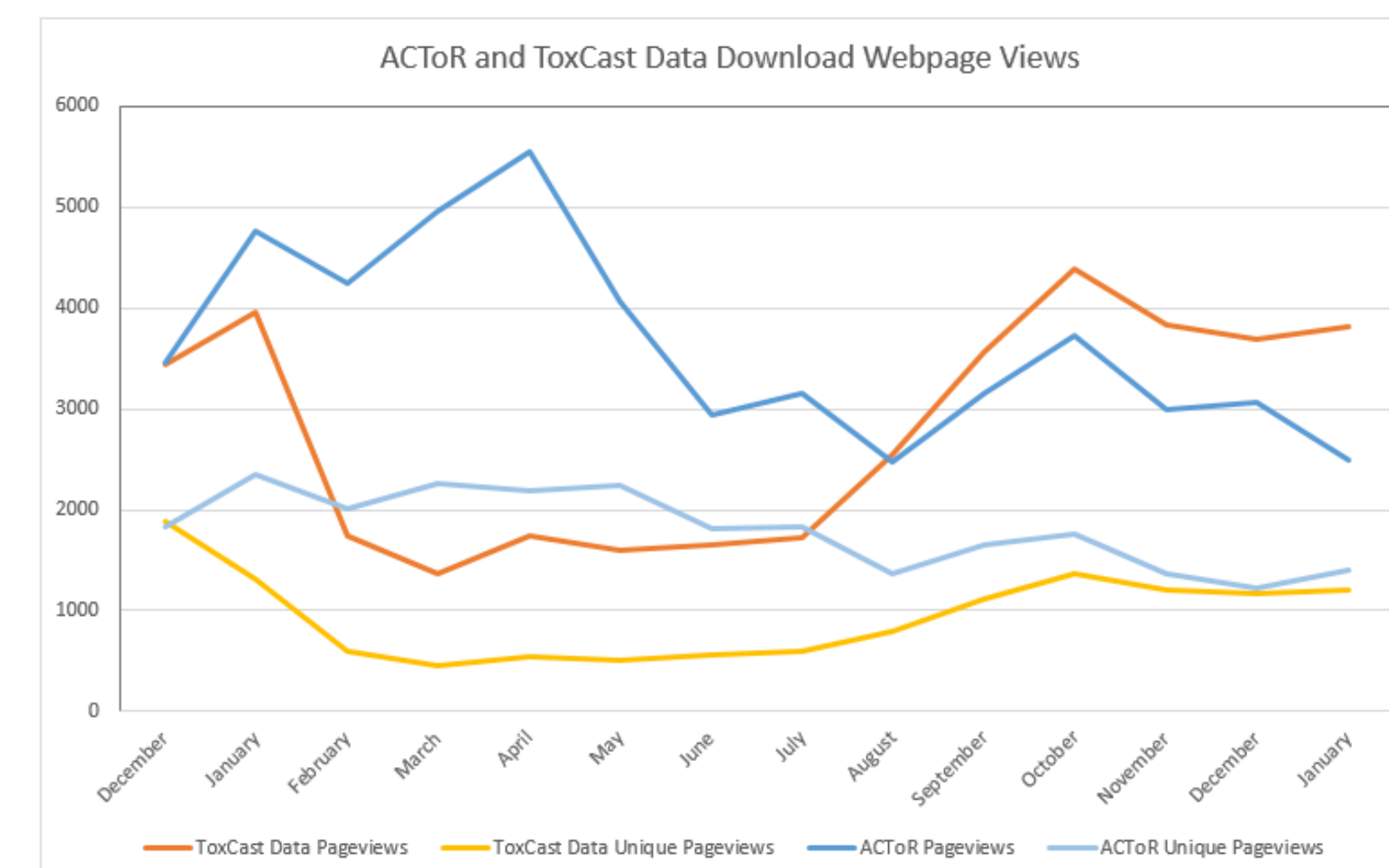


Figure 2B Many iCSS Dashboard users access the tool from by going to the ACToR webpage. From ACToR they are taken to the tool and interact with the ToxCast Data. From here, some user export the data of interest, or go to the ToxCast Data Download Page to access the full dataset released. Spikes in use of the data and dashboard are seen after events and the first video release.

Future Directions

The iCSS Dashboard and ToxCast Data, like many of the CompTox tools, is constantly evolving in order to bring the most up-to-date data in the most effective way to its stakeholders. Thus, the Tutorial Video series has planned additional videos.

Outline of Planned Videos			Release Date
1	iCSS Dashboard: Example Using iCSS Dashboard		Released 9/14
2	Overview of CompTox Tools		Expected Release 4/15
3	Data Download Page: Description of Files and Accessing Data		Expected Release 7/15
4	EDSP21 Dashboard		Expected Release 10/15
5	Detailed ToxCast Assay Data and Information		2016
6	Animal Toxicity Studies File		2016
7	Chemical List and Annotation Files		2016