



IowaView 2020 - 2021



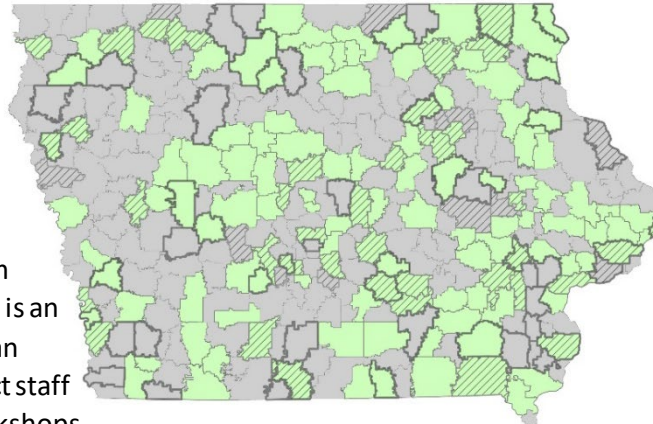
IowaView 2020 - 2021 ACTIVITIES

Exploring the Landscape of K-12 GIS and Remote Sensing Education in Iowa

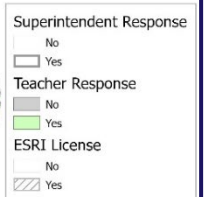
A strong geospatial foundation is a necessity to lay the framework for higher-level geospatial and remote sensing education. During 2020-2021 grant year, IowaView's efforts focused on understanding the current conditions of GIS and remote sensing (GIS/RS) education in K-12 Iowa classrooms. These efforts included an online survey of superintendents and educators, building relationships with other GIS/STEM organizations in the state, and creating an outreach deliverable based on the needs of the survey.

In Spring 2021, IowaView staff surveyed Iowa public school superintendents and K-12 teachers to understand how GIS/RS were currently being used in K-12 school districts and classrooms in Iowa. The surveys also provided a starting point for outreach and a way to assess if there is a need to improve access to available resources, such as Esri's free educational licensing and educational materials, as a way to build a foundation of GIS education throughout the state.

Initial findings from the survey found about 5 % of teachers surveyed are using GIS in their classrooms. GIS users were often introduced to GIS through continuing education workshops. Many non-user teachers commented that they were unfamiliar with GIS and would like more information about it. From these responses, it can be concluded that there is an information gap about what GIS is and how it can be utilized in the classroom. This spring, project staff plan to promote outreach through teacher workshops.



2021 Iowa K-12 GIS Survey Participation by Superintendents and Teachers



Outreach Activities During the Time of COVID-19

During the 2020-2021 grant year, many of our normal outreach activities during October (Earth Sciences Week/Earth Observation Day) and November (Geography Awareness Week/GIS Day) were not able to occur due to pandemic restrictions. However, IowaView staff chose to pivot and continue to provide content for those special weeks through our IowaView website and blog, as well as through an outdoor, in-person Halloween themed event.

Iowa View Blog

For Earth Science Week 2020, staff blogged every day, sharing content that fit with the daily theme as well as specific Iowa-related resources on that theme. Similar blogging efforts were employed during Geography Awareness week. Visit the IowaView website and search *Earth Science Week 2020* and *Geography Awareness Week 2020* for actual blog posts.

Spirits in the Gardens

IowaView staff participated the annual ISU Reiman Gardens *Spirits in the Gardens* event featuring a self-guided pathway with hundreds of carved pumpkins as well as "meet-the-scientist" opportunities along the way. We shared posters featuring remote sensing and GIS and gave away educational materials.

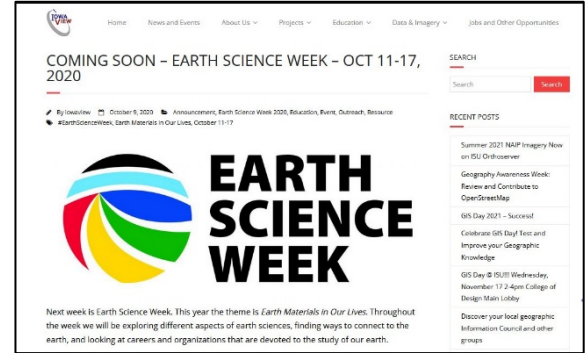


BENEFITS TO IOWA

- The primary goal of the K-12 GIS education survey was to better understand the current use of GIS in K-12 classrooms as well as understanding barriers to using GIS. This information is beneficial to IowaView, the Iowa Geographic Information Council, the State of Iowa, and other entities to help understand ground conditions and better target educational resources. A summary of the major findings of the study are available: <https://tinyurl.com/K-12GISpring2021summary>

One of the finding of the K-12 GIS education survey was that many teachers have never been formally exposed to GIS and are curious about it. In response, IowaView staff created a Story Map for Iowa K-12 educators to explore the basics of GIS, provide examples of how to use it in the classroom, and some hands-on introductions to tools for the classroom (ArcGIS Online, GeoInquires, and Story Maps). View the Story Map: <https://tinyurl.com/GISEducatorResources>

- Through blogging outreach efforts, IowaView served 375 users with 499 pageviews during the weeks surrounding Earth Science Week (Oct 4 – Oct 24, 2020.) Similarly, the blog served 285 users with 412 pageviews in the weeks around Geography Awareness Week (Nov 8 – Nov 28, 2020).
- During the session at Spirits in the Gardens, there were over 250 visitors of all ages. We presented posters of aerial imagery of Ames and Reiman Gardens dating from the 1930s to 2019 as part of their 25-year anniversary. Participants enjoyed seeing change over time as Ames has urbanized over the last ninety years. Staff gave out 65 goodie bags with AmericaView posters, USGS trading cards, and Earth as Art bookmarks and booklets.



An example of promotion efforts on the IowaView blog during Earth Science Week 2020



IowaView program manager Amy Logan presenting remote sensing posters at Spirits in the Gardens

IOWAVIEW CONSORTIUM MEMBERSHIP

The mission of the IowaView consortium is to increase the knowledge and use of remote sensing and other geospatial technologies for the benefit of the citizens of Iowa, through education, research and service. IowaView supports the collection and management of publicly accessible remote sensing data archives (ortho.gis.iastate.edu) which includes current and historic imagery, LiDAR elevation and other datasets useful for research and education. Collaborators come from several departments at ISU as well as from public agencies and organizations.



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