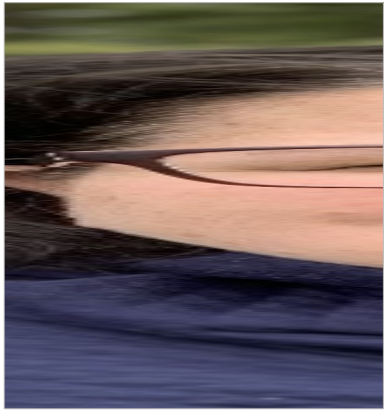
Integrating Public Feedback into Traveler Info Design:

An Agile Multi-State, Collaborative Approach

Co-presenters:
Sinclair Stolle, Iowa DOT
Mary Crowe, Castle Rock Associates

IOWA DOT castle rock.

Introductions



Sinclair Stolle

Traffic Management Systems Engineer

IOWA DOT

Mary Crowe

Director of Product Design and Delivery

castle rock.

Why are we here?

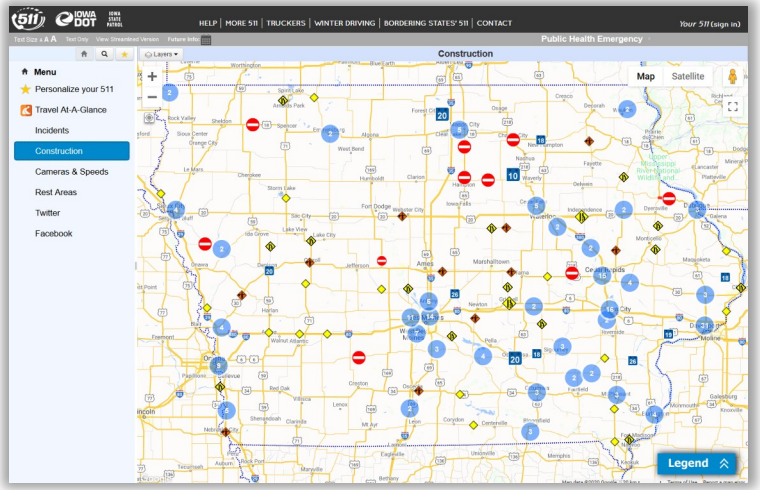
Vision for streamlining traveler information website

Collaboration with the transportation agencies

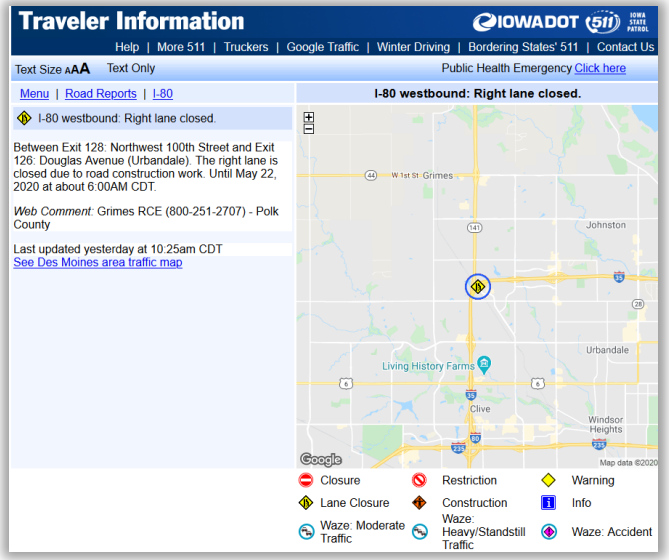
Active engagement with the public

Wanted to use an iterative, agile approach to new system

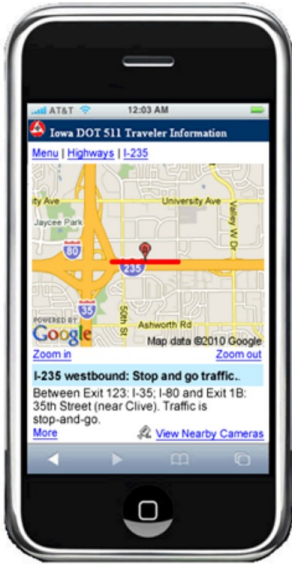
Where we started…



Full featured sites for general travelers and truckers



Limited feature site for users with low bandwidth connections



Limited feature site optimized for viewing on small screens

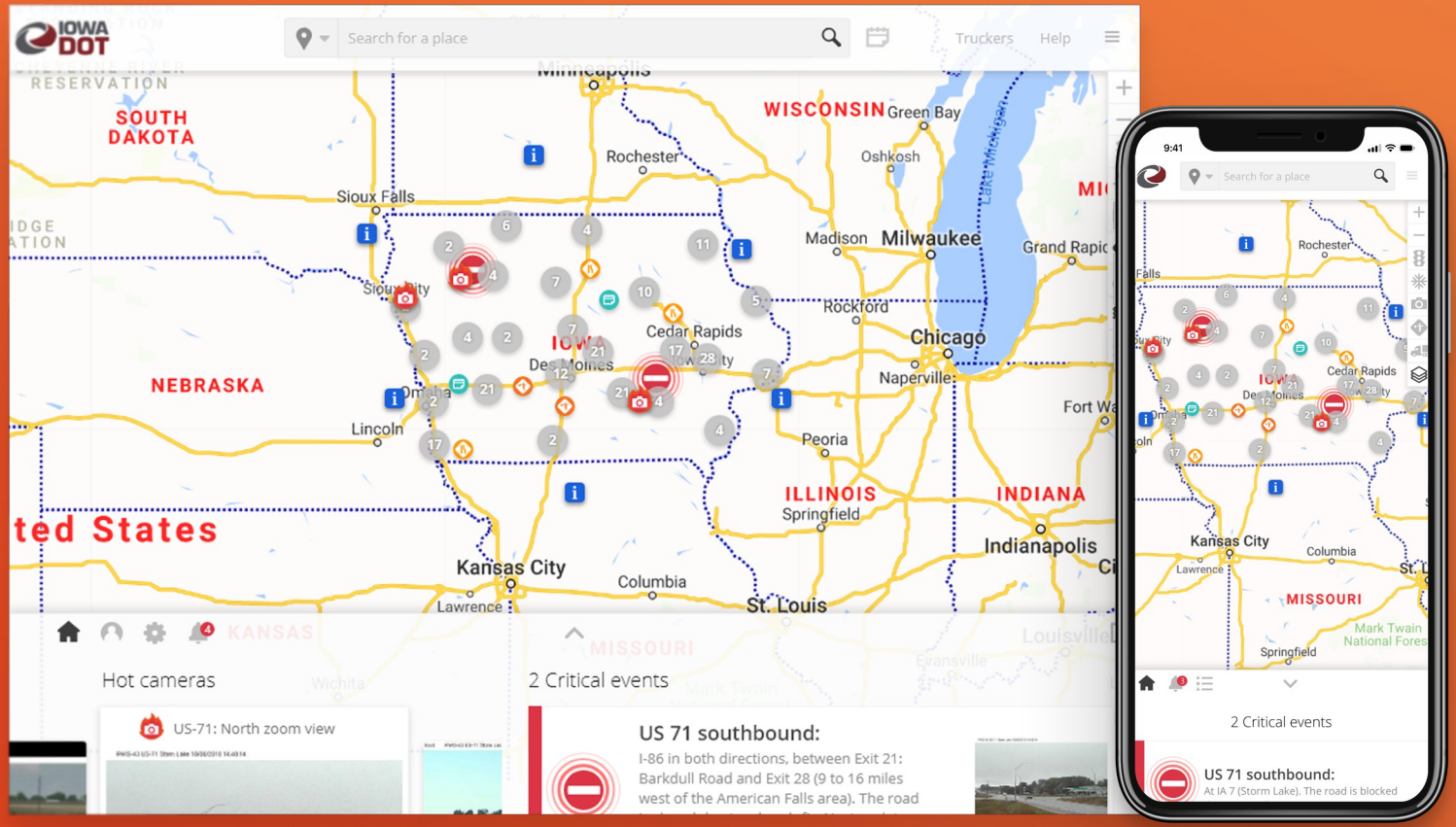
Major goals of the redesign

Modern, **responsive** design for web browsers, tablets, and mobile devices

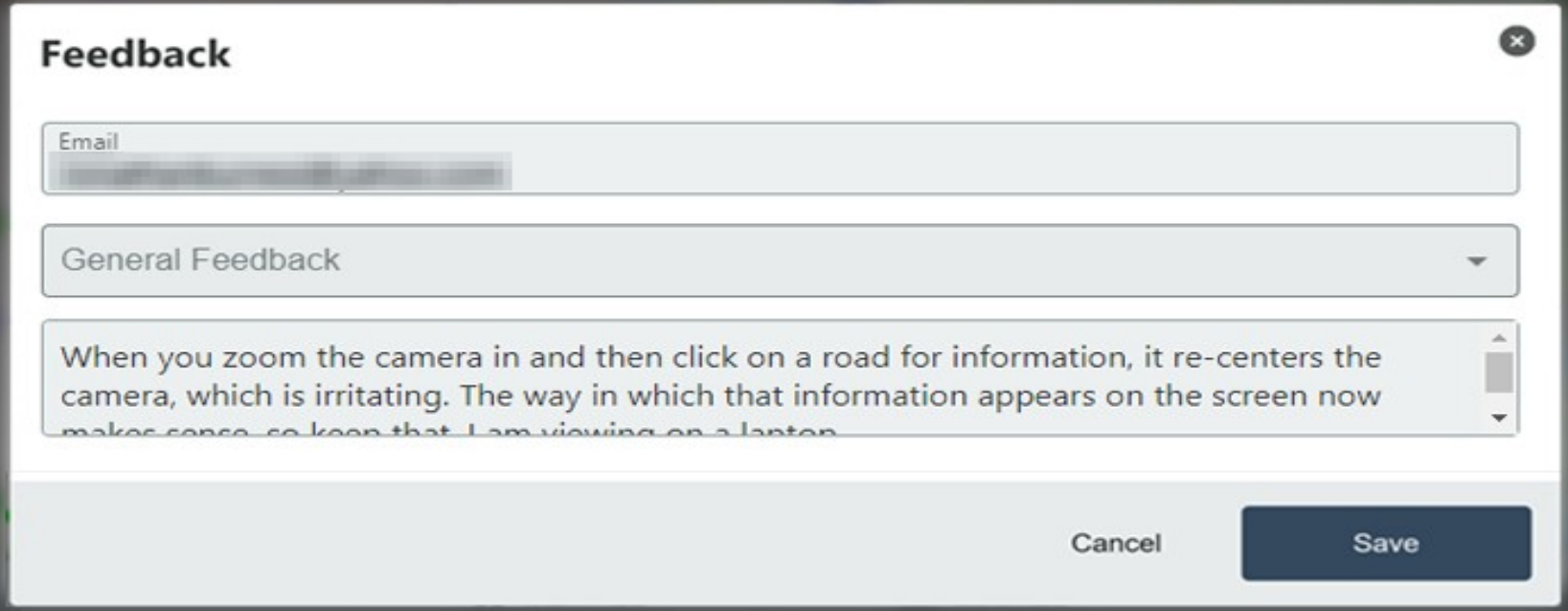
Serve multiple user groups on a **single site** without cluttering the map (merging general travelers, truckers, and low bandwidth users)

Improve **understanding of users** through website user feedback forms and enhanced site analytics

Version 1.0: Responsive Design + Single Site



Better understanding of user behavior



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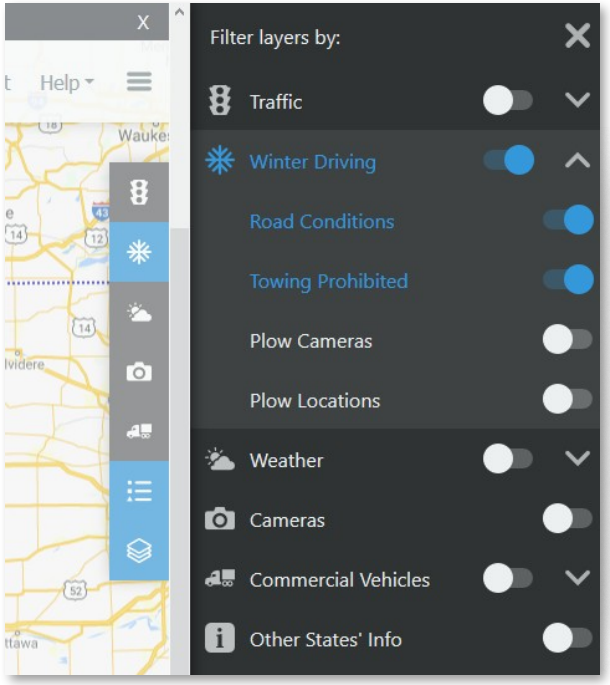


Their favorite layers?

- 34,733 clicks - Cameras
- 16,427 clicks - Traffic or Road Reports
- 14,449 clicks - Trucker Reports
- 7,577 clicks - Road Conditions
- 2,934 clicks - Weather Stations
- 2,521 clicks - Traffic Speeds
- 1,681 clicks - Other States
- 1,115 clicks - Plow Cameras
- 1,069 clicks - Mountain Passes

Agile approach to design & development

DOT	Submitter	Created	Component	Feedback Text
				('Unplanned Events' or 'Critical Disruptions') ?
Iowa	Iowa	03/16/20	Layer Panel	Redesign needed for the layers menu and legend. - Need text labels for each layer group. Currently the buttons are not recognizable or easy to understand. - Need to eliminate the animation that "pops out" the layer panel. Should be constantly visible on the map.
Iowa	Iowa	03/16/20	Event Tray	Should we move the tray from the bottom of the screen (horizontal) to the left side of the screen (vertical)? This would allow for more map real estate.
KDOT	KDOT	03/11/20	Navigation/Zooming	Why is it zoomed out so far on load - configurable per client
Minnesota	Minnesota	03/11/20	Icons	Can OneWeb show flooding? - yes
Idaho	Idaho	03/11/20	Layers	Does the default show layers that an occasional user would want to view or does the user always have to turn on the layers they want? - there are default layers, can configure diff layers seasonally

- **Partnership** with Iowa, Idaho, and Minnesota
- **Interactive mock-ups** for reviewing new designs before development
- **Staging sites** for live demos and testing of features as they were developed

Agile launch approach

- Used the **legacy sites** to push users to the new site to provide feedback
- **Identified common user feedback** to direct improvements to the website
- **Held interviews** with members of the public

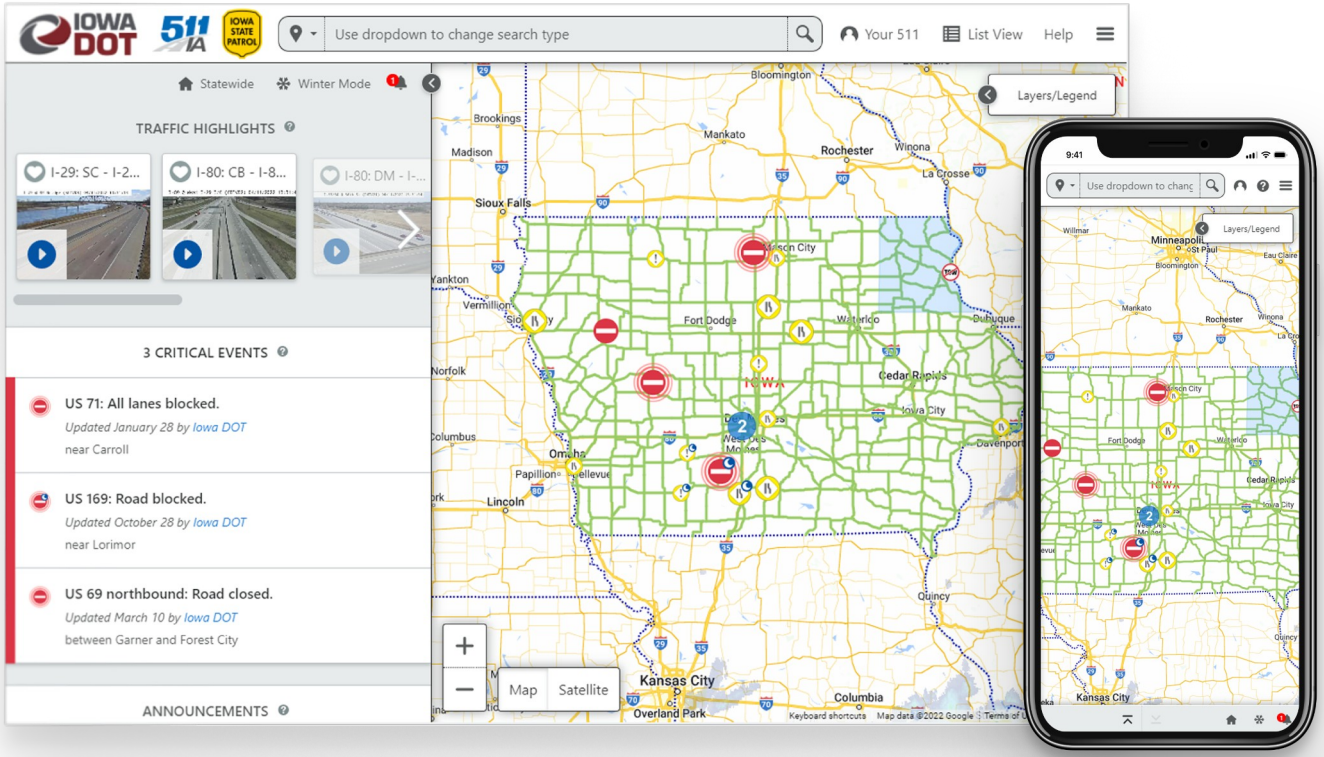
Insights from Version 1.0 launch

Desktop layout with content along the bottom of the screen was disorienting and confusing to users

Users could not find the **layer control panel** to update the content shown on the map

Users **love** cameras and winter road conditions

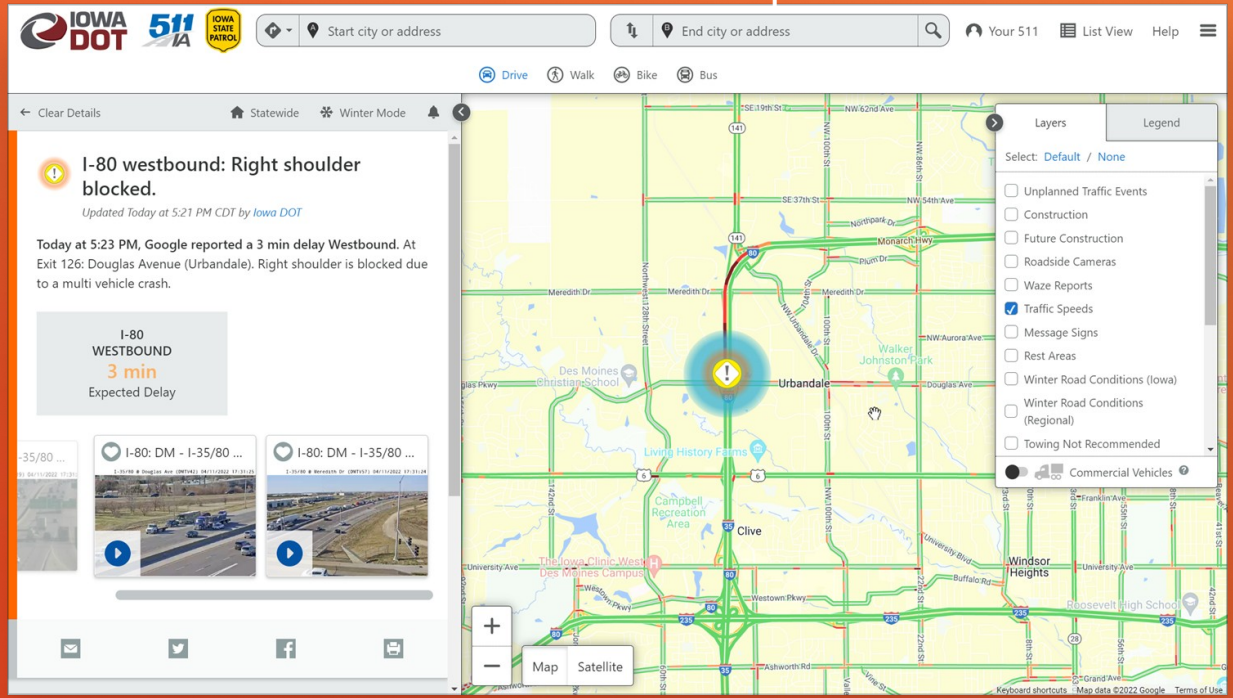
Version 2.0: Acting on user feedback



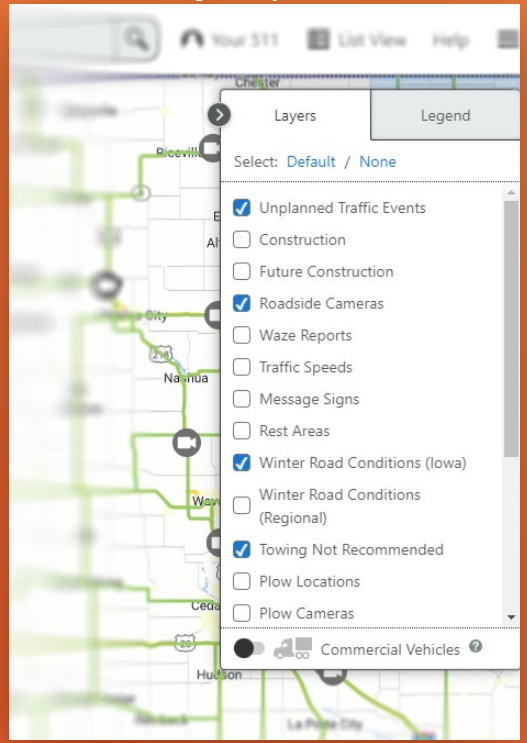
Launch dates

- Version 1.0 - Jan 2020
- Version 2.0 - Nov 2020

Moved content to left side of screen on desktop views



User friendly layer panel



Commercial vehicle mode

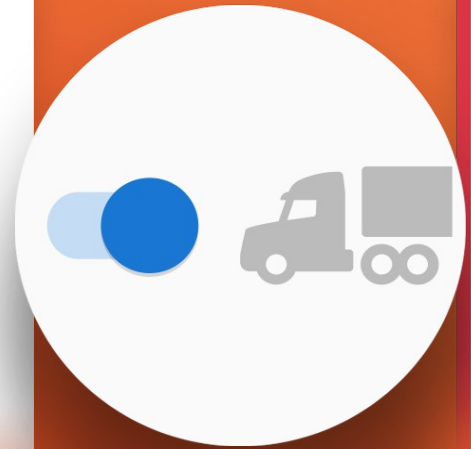
IA 117 southbound: Road construction.

Updated March 11 by Iowa DOT

Between County Road F48 and IA 163 (near Prairie City). Road construction work is in progress. Look out for temporary traffic lights. There is a height limit in effect. There is a width limit in effect. Height limit 15'0". Width limit 15'0". Until June 17, 2022 at about 4:00PM CDT. Full schedule below:

- March 21, 7:00AM - June 17, 4:00PM

Comment: Marshalltown RCE (800-251-2706) - Jasper County



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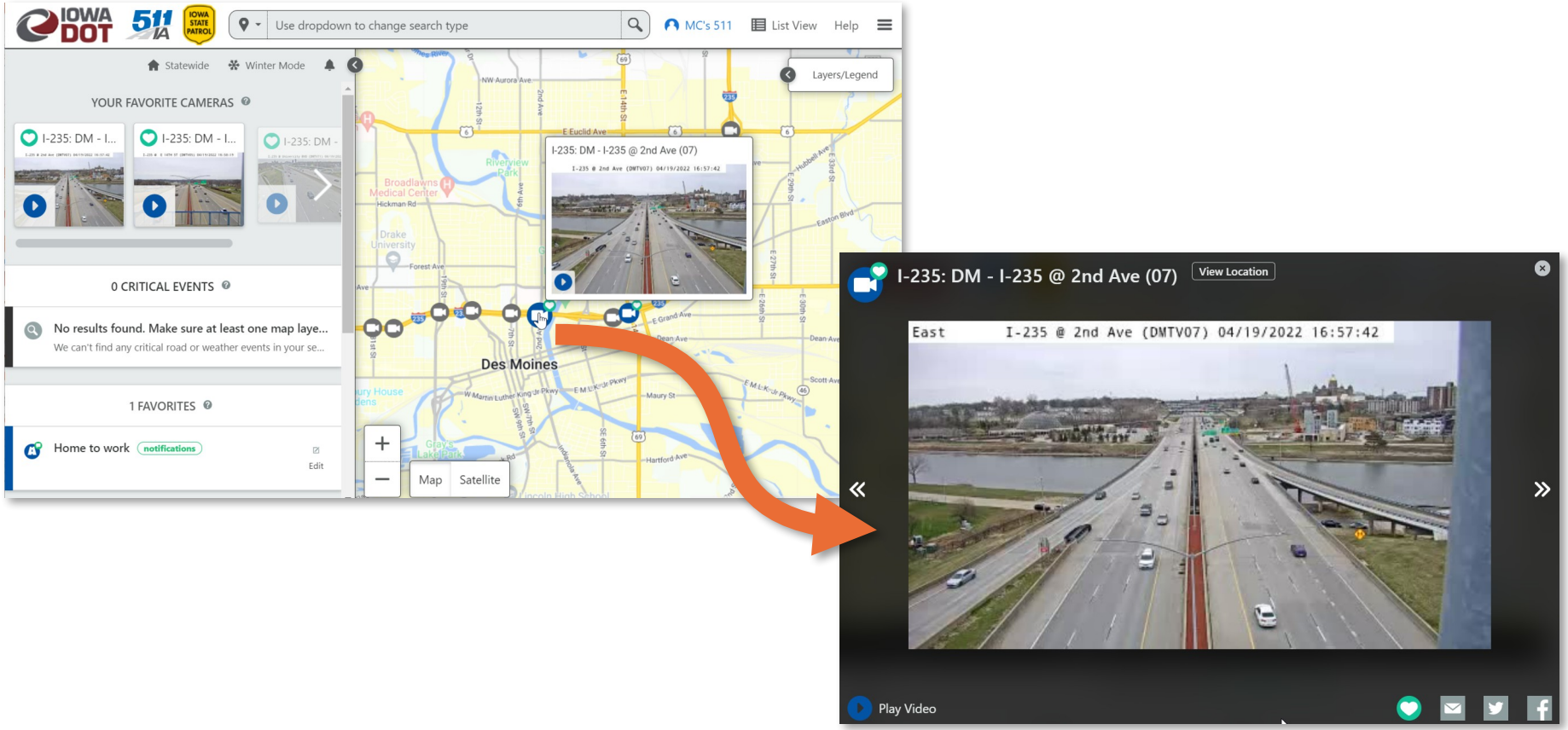
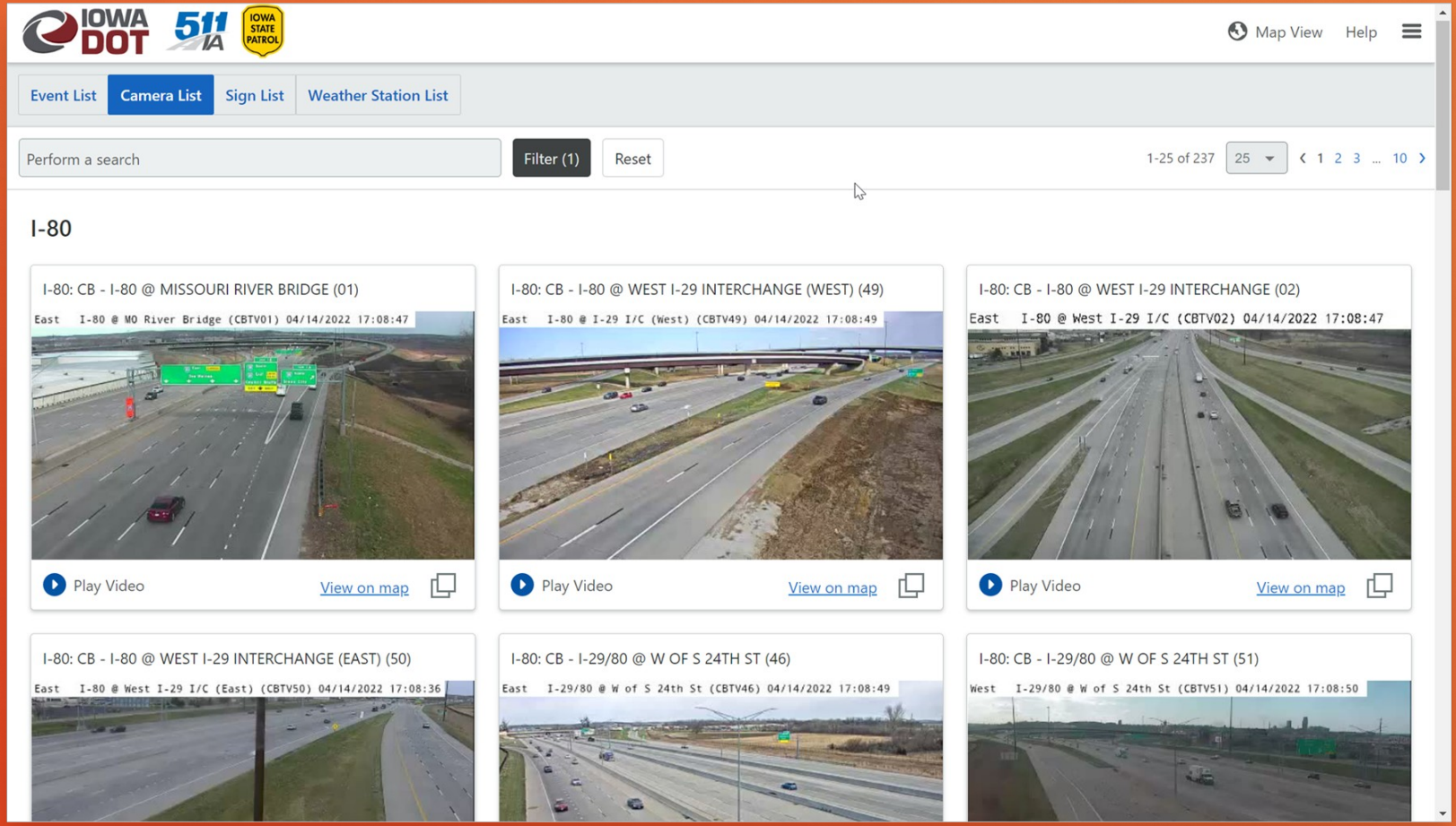
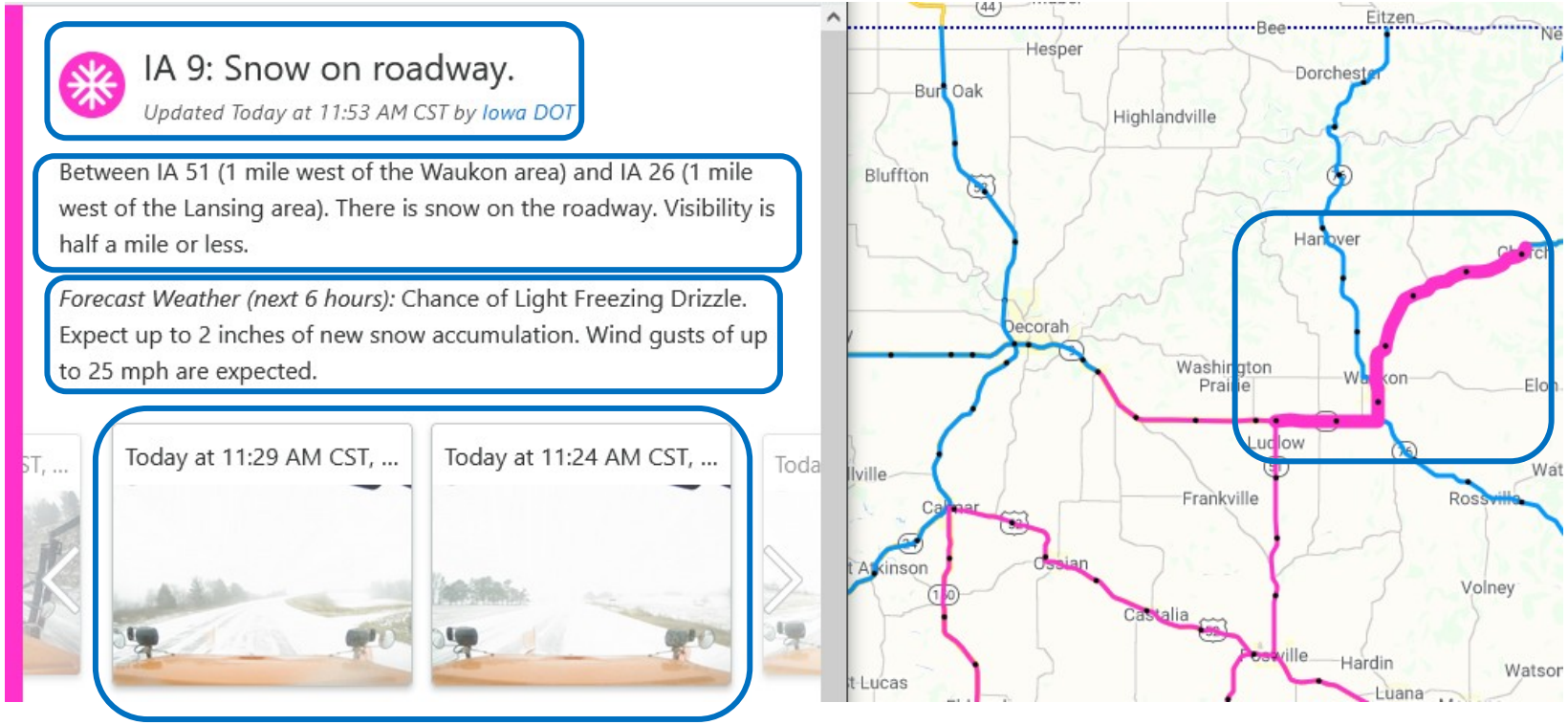
Focus on Cameras



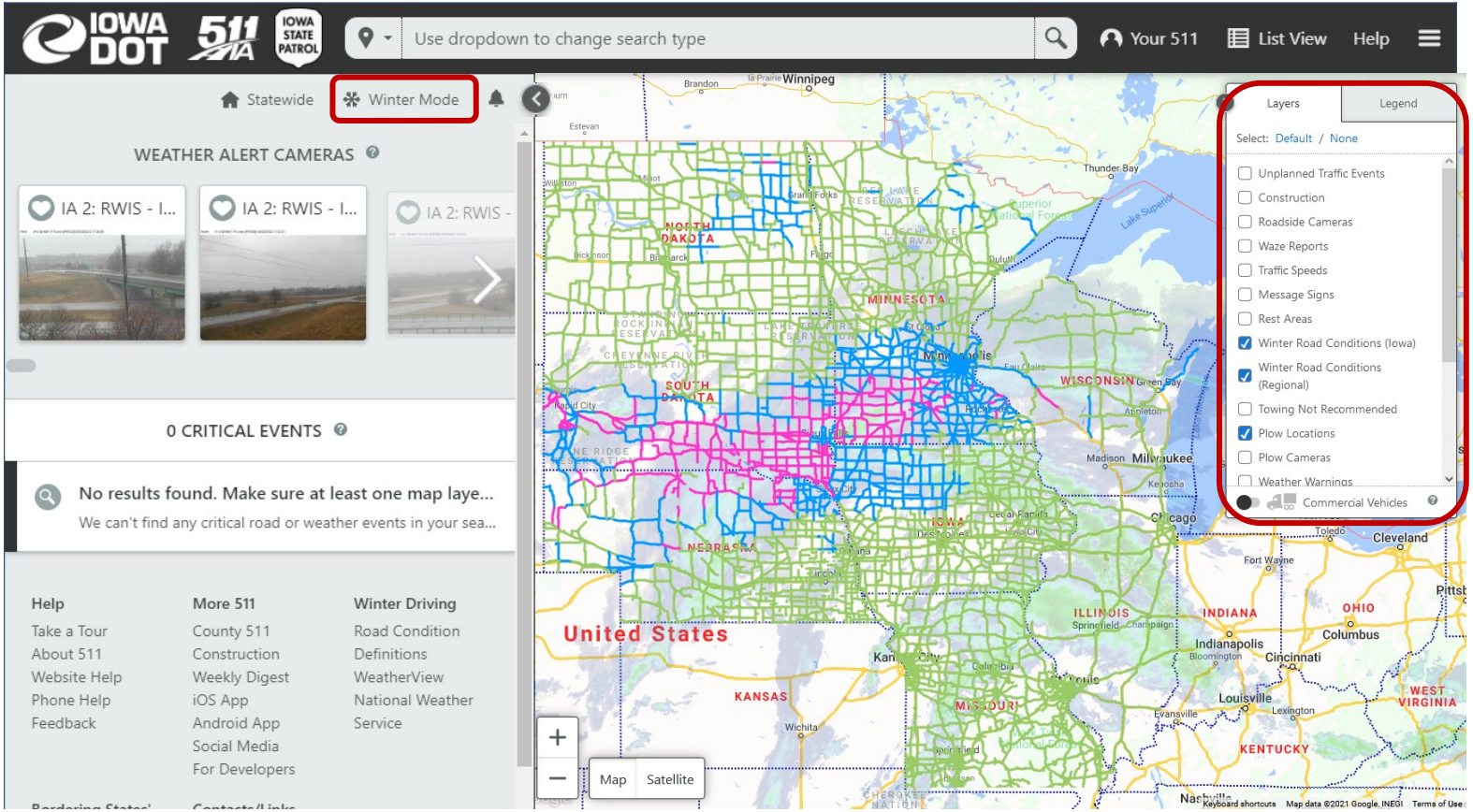
List views, too!



Focus on winter road conditions



Focus on winter road conditions - Regionally



We ♥ our end users

"I never thought I would give kudos to a federal/state website. Frankly, almost 100% of them are terribly thought out, poorly planned, and often useless. This is not the case with 511. **It is darn near perfect.** Great information, use of technology, easy to navigate, on and on. **Great job to the group who got this together."**

Chris Dorsey Fargo, ND
2/21/22

The process continues…

- Other states have launched the new site including **County of Dubuque (Iowa), Kansas, Nebraska, Colorado, Indiana and Sacramento**
- Frequent **road mapping sessions** to discuss trends
- **Recent improvements** include camera hovering, winter mode button, and separate layer for future construction projects…more are coming soon!
- Applying **similar processes** to design and build the next versions of other traveler information products

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