



Living Roadway Trust Fund

Roadside Inventories & Remnant Vegetation Surveys

Roadside Inventories

- Collect baseline information about roadside conditions to inform management priorities
- Herbaceous cover, woody cover, bare areas, erosion, encroachment, invasive species, etc.

Remnant Vegetation Surveys

- Mapping of areas of native vegetation that have never been plowed for a potential seed source
- More in-depth identification of species present within the remnant.



Roadside Inventories

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Past Inventories

- Paper forms, inconsistent data formats, inconsistent data collection between counties

Objective

- Develop a consistent, repeatable, and easy-to-use survey data collection methods for use during Roadside Vegetation Inventories
- Make data easily accessible to both Counties and Iowa DOT



Roadside Inventories

Encroachment (point feature)	
Level of Encroachment	<p>Planted crops are the primary encroachment in county ROW. Evaluate the level of encroachment using the following guidance.</p> <ul style="list-style-type: none"> ○ Slight – Generally near top of backslope, poses little if any safety concerns. ○ Moderate – Extends into ditch bottom, may pose a safety concern if not addressed. ○ Extensive – May extend into foreslope of roadway and is a safety concern due to close proximity to roadway.
General Remarks	Any other relevant comments about the encroachment.

Erosional Feature (point feature)	
Erosional Feature	<p>A location where substantial erosion is occurring in ROW including the erosional feature type.</p> <ul style="list-style-type: none"> ○ Scour – Areas where soil has been eroded by fast-moving water leaving behind scour holes. Commonly form near culverts. ○ Rill – One of numerous small, parallel channels eroded into the soil surface. ○ Gully – A ravine formed by recent erosion that is generally deeper than it is wide. ○ Slump – When an intact block of soil slides a short distance downslope ○ Other – Any other substantial erosion that doesn't fit the above categories.
Erosion Remarks	Any other relevant comments about observed erosion in the ROW.

Other Point of Concern (point feature)	
Description	This feature is a catch-all for anything noteworthy that is observed in the ROW but does not fit into other categories.

Native Seeding (polyline feature)	
Road Name	Name of roadway adjacent to area seeded with native vegetation
Direction	Side of roadway that was seeded with native vegetation described in terms of traffic direction – Northbound, Southbound, Eastbound, Westbound.
Seeding Method	Method that was used to plant the native seeds – Drill Seed, Hydroseed, Broadcast Seed, Hand Seed, Combination, Other or Unknown.
Other Seeding Method	If "Other" was selected for seeding method, describe here.
Seed Mix	Type of seed mix used such as Low Diversity Native/Ditch Clean-Out, High Diversity Native, Dry Native, Mesic Native, Wet Native, Pollinator, Non-Native or Other.
Other Seed Mix	If "Other" was selected for seed mix, describe here.
Date Seeded	Approximate date the seeding occurred.

Mowing/Spraying Zones (polyline feature)	
Road Name	Name of roadway adjacent to mowing/spraying zone
Direction	Side of roadway of permitted mowing/spraying zone described in terms of traffic direction – Northbound, Southbound, Eastbound, Westbound.

Permitted Treatment	If a landowner has a permit to spray or mow within this section of the ROW, choose the relevant permit type: Mowing, Spraying, Mowing & Spraying,.
Mowing Permit Number	Permit Number
General Remarks	Any other relevant comments regarding permitted mowing or spraying.

Remnant Vegetation Survey	
Surveyor	Name or initials of the one collecting the data
Site Description	Name of the prairie, landowner name, or description of location.
Grass/Sedge (1-10)	Native grass or sedge species found within the area of remnant vegetation. There are fields available to document up to 10 grasses or sedges.
Forb (1-15)	Native forb species found within the area of remnant vegetation. There are fields available to document up to 15 forbs.
Tree/Shrub (1-8)	Native tree or shrub species found within the area of remnant vegetation. There are fields available to document up to 8 trees or shrubs.
Fern/Vine (1-5)	Native fern or vine species found within the area of remnant vegetation. There are fields available to document up to 5 ferns or vines.
Other Species	Other species worth noting in addition to the above species.
General Remarks	Any other relevant comments regarding the remnant vegetation.

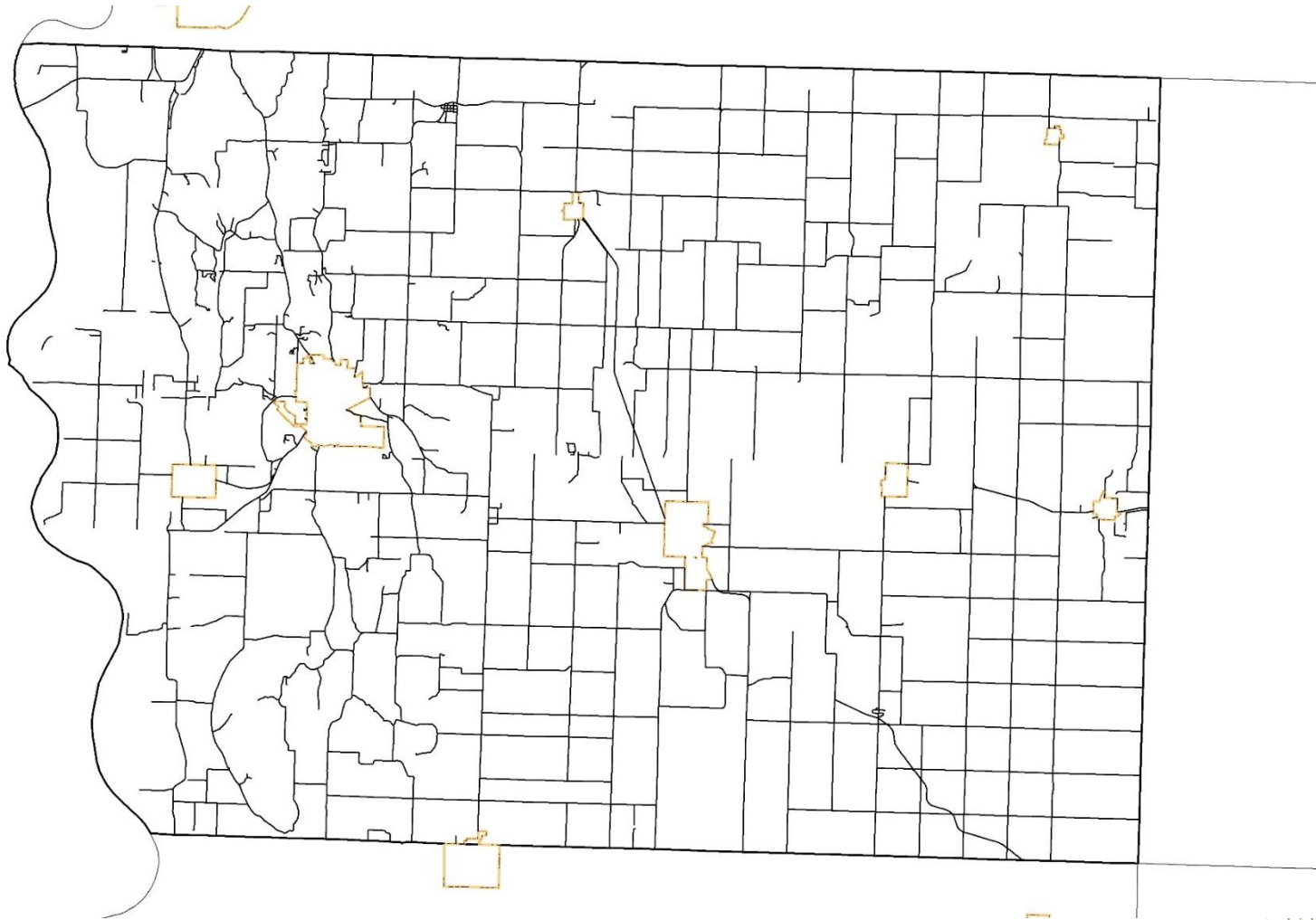
Noxious Weed (polygon feature)	
Noxious Weed	State listed noxious weeds in Iowa.
Invasive Tree/Shrub	Common invasive trees and shrubs.
Other Invasive	Other problematic species observed that are not officially designated as noxious.
Other Species	Any other problematic species that are not included in the dropdown list for other invasives.

ROW - Unique Ecosystems (polygon feature)	
ROW Ecology	Areas of relatively high ecological quality found within the ROW – Prairie, Oak Savannah, Woodland, Shrubland, Wetland, or Other.
General Remarks	Any other relevant comments regarding the unique ecosystem being documented.

Roadside Vegetation Survey (polygon feature)	
Surveyor	Name or initials of the one collecting the data
Vegetation: Native Coverage	Approximate percentage of soil within the ROW covered by species that are native to Iowa.
Vegetation: Non-native Coverage	Approximate percentage of soil within the ROW covered by species that are not native to Iowa.
Dominant Native	Dominant native species are those species native to Iowa that have the greatest coverage within the ROW. There are fields to document up to three dominant native species if warranted.

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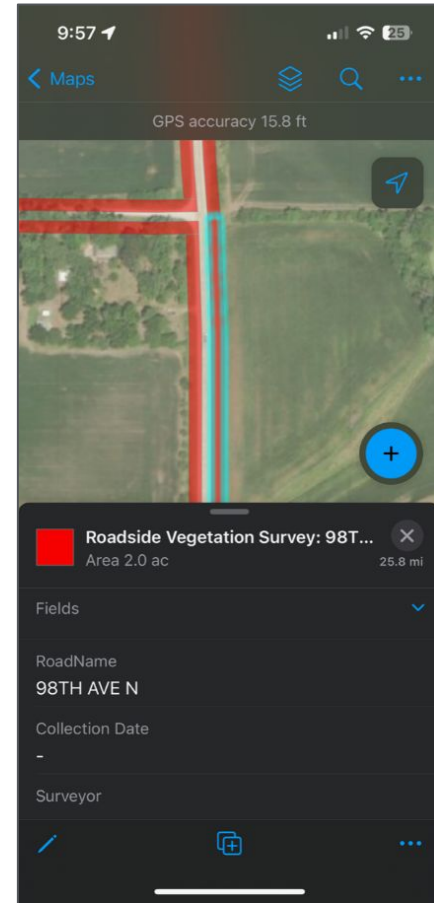
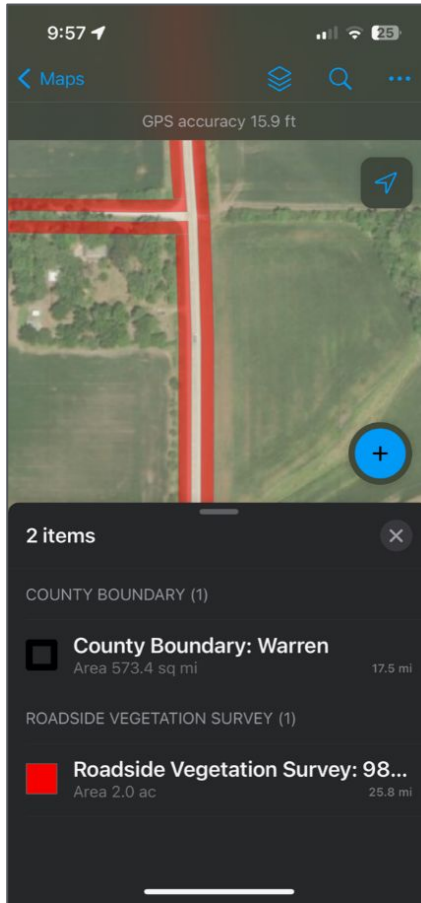
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- Roadside Geodatabase hosted on Iowa DOT's ArcGIS Esri Online Account
- Data can be collected through free app on any smartphone or tablet



ArcGIS® Field Maps

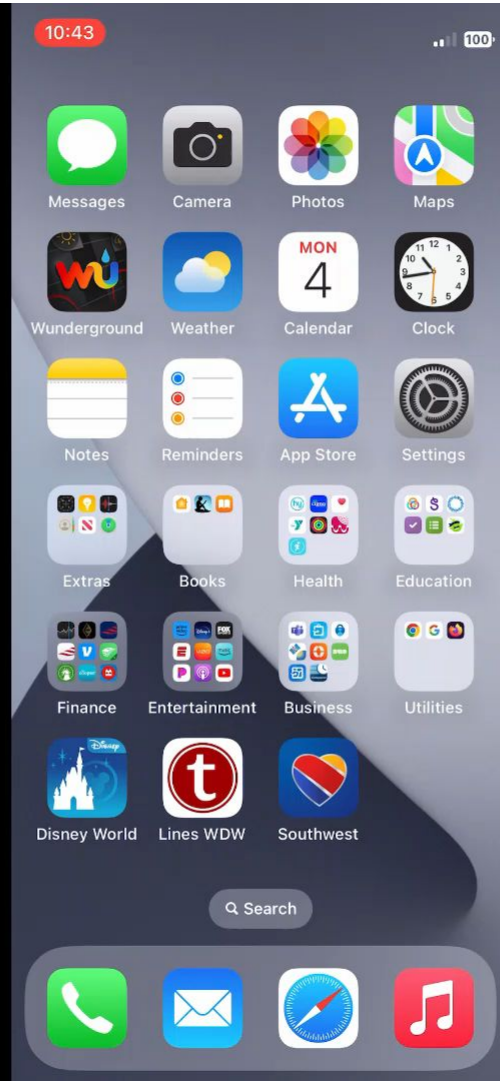
The screenshot shows the Iowa DOT Open Data Portal interface. On the left, there are four download options, each with a red arrow pointing to it:

- CSV**: File created: Aug 4, 2022, 23:30; File size: 8.1 KB
- KML**: File created: Aug 4, 2022, 23:30; File size: 222.9 KB
- Shapefile**: File created: Aug 4, 2022, 23:30; File size: 195.8 KB
- GeoJSON**: File created: Aug 4, 2022, 23:30; File size: 242.7 KB

The main area displays a map of Iowa with a network of blue lines representing roadside inventory data. The map includes labels for various cities and counties, such as Sioux Falls, Worthington, Albert Lea, Austin, La Crosse, Spencer, Mason City, Des Moines, Dubuque, Waterloo, Davenport, Iowa City, Cedar Rapids, Marshalltown, Ankeny, Ottumwa, Kirksville, Lincoln, Omaha, Fremont, Columbus, Norfolk, Yorkton, Sioux City, Storm Lake, Fort Dodge, and Des Moines. The map also shows state boundaries for Iowa, Illinois, and Missouri.

- Data can be downloaded through Iowa DOT's Open Data Portal in a variety of formats

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